

THE NATIONAL WOOL GROWER

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EDITOR.....F. R. MARSHALL
Salt Lake City, Utah

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Affairs Of Wool And Sheep

The Wool Situation:

July and August have always been dull months in the wool trade. On account of the unusually large amount of wool consigned this year, growers have been especially disturbed by this seasonal condition which in other years they only slightly appreciate. In his regular letter in this issue, our Boston correspondent presents the situation in a very logical and hopeful style. Later reports from London wool sales give added grounds for encouragement and for expectations of reasonable activity and prices during the remainder of the season.

While there have been some forced sales, both dealers and growers have shown commendable courage and confidence in the value of their holdings. Orderly marketing has prevailed and general benefit resulted through prevention of decline in values. It should not yet be thought that the entire amount of consigned wools can be disposed of in a few weeks or months. The trade calls for wool throughout the year and cost of storage and financing through the intermediate period must be carried by one or the other side of the trade. The improved financial condition of the growers is in part responsible for their steadiness through the recent period. However, they have come to a higher appreciation of the necessity of preventing the overloading of inactive markets when the fundamental conditions are sound. These conditions afford good grounds for expecting still further advances in the marketing of the 1924 clip.

Enforcing Fabric Laws:

The Wyoming Wool Growers Association has arranged for active steps in securing the enforcement of the Wyoming Pure Wool Act of 1921. Since the passage of this act labeling of woolen goods sold in Wyoming has been quite general and students of

the situation report that valuable protection has been afforded purchasers against unidentified shoddy.

Opponents of this type of legislation have advanced the claim that the Wyoming act is unenforceable on the grounds of the same objections that have been lodged against the French-Capper bill. As a means of clarifying the entire situation and furnishing precedent, the Wyoming Association will insist that state officials shall prosecute to the fullest extent all parties found to have mislabeled woolen goods, or who have failed to label in accordance with the act.

Stabilizing Lamb Markets:

August operations at the lamb markets strongly suggested a recurrence of the steady values of the 1922 marketing season. August of 1921 was a disastrous month for shippers. On Monday, the 22nd, Chicago received 29,000, while 35,000 arrived at Omaha. Correspondingly heavy receipts continued throughout the week and prices declined 25 cents each day. The following Monday brought still higher receipts and the decline continued until Tuesday, September 6th, when runs were checked and prices began to mend. On the latter day, however, Omaha had 40,000 but made a slight improvement in prices due to feeder demand and smaller receipts at Chicago, which market seems largely to determine the prices to be paid all around the circle for killing stock.

What the present situation would be if determined entirely by killing values is impossible to foretell. The confidence of feeders and their anxiety to lay in enough supplies has furnished the increased competition for the killing interests. Added to this, August brought its usual revival of purchases at Western markets on the part of

Eastern killing concerns, which draw mainly on farm lambs during June and July.

The October Wool Grower will contain a graphic presentation of variations in the relation between lamb prices and market receipts. Even should the market continue to act satisfactorily during the present month, the need remains for study and concerted action on the part of growers to regulate supplies in such a way as to prevent congestion of markets in later months or in future years when supply occupies a different relation toward demand.

Forest Grazing Fees:

Either Secretary Wallace or the Forest Service seems determined to introduce the commercial basis for fixing fees for grazing live stock in the National Forests. The committee which represented the stockmen at the Denver conference in June objected strongly to the Forest Service's proposal to prescribe the commercial basis in the new manual about to be published, in these words: "Grazing fees will be determined by appraisal based upon commercial values of comparable grazing land owned by private persons, corporations, states, Government Indian reservations or other Government lands used for grazing purposes."

The above has been the basis of the appraisal work conducted by the Forest Service during the past three years. As stated in the grazing manual, it has been understood that with this appraisal "due allowance will be made for cases showing abnormal competition or those cases involving considerations other than use of the forage resources."

The committee asked that the language in the new manual as relating to the basis of fees be general in character and such as to allow fair and ample considerations for all factors bearing upon the stockman's ability to pay and recognizing his rights to the use of the grazing resources. Since that time the Forest Service has indicated of its intention of publishing the following: "The Forester has the authority to prescribe such rules as may be necessary to determine just and reasonable rates to be charged for

the grazing of live stock on the National Forests, in consideration of (1) a proper use of the grazing resources to best serve the public interest; (2) reasonable consideration of the commercial value of the forage to the livestock industry; and (3) the effect of the rates upon the livestock producers."

Chief Forester Greeley advises that it is not yet possible to report the result of the re-appraisal of grazing fees. It is his intention to submit the work of the re-appraisal and the revision of the fees resulting therefrom first to the livestock associations. The appraisers' report, together with the criticism of the stockmen, will then be placed before Colonel Greeley and the official decision made as to fees to go into effect in 1925. This decision, it is understood, will be announced in time to permit of full consideration at the annual conventions of state and national associations. Unless a full and clear report of the work of re-appraisal shall be forthcoming within the next few weeks, it must appear that the Forest Service is becoming entangled in a web of its own weaving.

PRESIDENT COOLIDGE AND THE WOOL TARIFF

"Give Administration a Chance to Catch Up With Legislation"

—President Coolidge.

Among the various criticisms and arguments which for years past have been aimed against properly protective tariff on wools produced in the United States, has been the statement that wool tariffs did not help the grower because statistics showed that the increase in the numbers of sheep in the farm and range flocks of the country did not respond properly to the beneficent effects of a tariff.

The proponents of these arguments do not bear in mind the physical and financial conditions surrounding the upbuilding of the flocks of the great expanse of country embraced in the United States. They imagine that the building up of a flock is an over-night affair; in other words, we get a tariff today and we will have a flock tomorrow. On the contrary, proof is that under the most favorable

conditions, the flock master requires a number of years for the building up of new or larger bands. During the process of increase in order to pay his expense of operation, to purchase needed equipment and to provide monies for other legitimate production purposes, the sheepman is compelled to sell not only his wool crop and his wether lambs, but also a considerable number of his ewe lambs. It is a fact that ten years of uninterrupted prosperity would be required as a minimum period in which to double the flocks of the United States.

When have we ever had, since 1886, when the Mills bill was introduced in Congress, a period of ten years of prosperity for the wool-growing industry? On the contrary, we find that every four years there is a political proposition on foot either to change the tariff. The results of these agitations have been uncertainty and hesitancy on the part of investors, curtailed credits to the flock master, and the throwing of the whole business of wool growing and lamb raising into a turmoil.

At the present time even before the ink was dry on the Fordney-McCumber tariff bill recently passed by Congress, a propagandum began to be agitated looking toward a lowering of the wool tariff—and this notwithstanding the fact that Congress spent months in writing the wool tariff and most exhaustive hearings were granted every interest involved, both for and against. How ridiculous as a commercial proposition and how adverse to commercial stability, which is so essential in business, that there should even be a possibility of re-opening the tariff on wool before the present rate had been in effect long enough to cover the marketing of a clip of wool and a crop of lambs! There are no new facts or points to investigate that Congress did not have in its hands when the law was enacted.

Congress in its wisdom adopted what was known as the flexible provision, allowing the President to lower or raise the tariff by fifty per cent of the rates named in the Fordney-McCumber law. This provision, however, did not mean that Congress had delegated to the Tariff Commission, acting for the President, its power to re-write a tariff even before it had become fully operative. The flexible

provision, it is to be presumed, was based on a common sense application and not as a medium for the ex parte opponents of a tariff to work their will either for or against certain rates. It was no doubt presumed to be the machine for the sifting and sorting of facts as developed by world and domestic conditions affecting the tariff after the law had been in effect a sufficient length of time to develop data from which to develop facts.

Fortunately so far as the public has been advised up to date, President Coolidge is inclined to take a conservative view of the Tariff Commission's functioning and will be guided by developing and known facts instead of by theory. He realizes that business cannot be stable and at the same time constantly agitated. Time will undoubtedly develop certain necessary changes which will have to be made in the tariff. Justice to commerce may demand these changes. There is no error in the tariff of sufficiently great moment to warrant the constant fear on the part of business that tariff rates in various lines of industry will be subject to over-night and arbitrary readjustment. The flexible provision was written for a purpose, as the debates in Congress will demonstrate, and we can only rely upon President Coolidge to adhere to that purpose.

As a matter of precaution and self-preservation, and in view of certain attacks that have and are certain to be made by powerfully organized interests for the reduction of tariffs—and let it be known that these efforts are aimed largely at agricultural, live stock and other Western products erroneously called raw materials—the president, secretary and executive committee of the National Wool Growers Association have seen fit to take a leading part in the formation of a Western Tariff Association. We believe that no single industry will be able to stand alone against the powerful attacks which may be made against it before the Tariff Commission by well-organized and well-financed Eastern manufacturing interests. We believe that the wool

grower with his wool and lamb, the dairyman with his casein, the cattleman with his feeder and stock cattle, the farmer with his vegetable oils, and others on down the line will be led to slaughter. We believe that the only manner in which these individual attacks, where unjust and uncalled for, can be defeated will be by organizing various Western producing interests—be they agricultural, live stock, mineral, or what not—and presenting a common front guided by unity of action.

It is proposed that the Western Tariff Association shall be properly and permanently organized at a meeting known as the Western Tariff Congress, at Denver, on October 3rd. This association, when perfected, will serve as a medium for the proper presentation of facts before the Tariff Commission in Washington whenever any member of the producers' organization is under attack. We hope to demonstrate effectively and permanently to the commission the commercial and economic factors involved in these matters. We have no political role to play, nor do we wish to be known as living in glass houses and casting stones at our neighbors who may have a just cause for complaint against certain tariffs. Our sole purpose is to seek daylight and justice and to protect our weaker individual members and assist in presenting facts before the proper tribunal in the proper way. We can conceive of a situation where owing to world's shortage in wool and the consequent advance of world prices for wool that the present tariff of 31 cents per pound may be more than necessary to afford adequate protection for the American grower. However, that time has not yet arrived, nor is it in sight, and until it does arrive, we feel that the present tariff should remain in status quo. F. J. Hagenbarth.

CALIFORNIA'S COYOTE CAMPAIGN

The fight of the California Wool Growers Association to secure adequate funds to carry on the Federal

Biological Survey System of Predatory Animal Control is producing results.

The first real progress was made when Governor Richardson signed the bill appropriating \$50,000 to apply over the next two years. The act provides that the California State Director of Agriculture may employ hunters and expert trappers for the purpose of carrying on this work, and that he may enter into contracts with the Bureau of Biological Survey of the United States Department of Agriculture, in order to enlist the support of the Federal Government. The trained men of the Federal Government have been placed in charge of the work in those counties asking for assistance.

That the Federal Government is ready to do its share is evidenced by a letter from H. C. Wallace, Secretary of Agriculture, to the California Wool Growers Association, which states: "It is unfortunate that the appropriation for the co-operative funds in California was made so late that the funds available for the use of the Bureau of Biological Survey in the predatory animal work had already been appropriated and co-operative arrangements made for their expenditure with the stockmen in the states where this work is being conducted, thus making it impracticable to reapportion funds from that source to meet the new situation in California. A special reserve fund to meet emergencies has been set up, however, and on the recommendation of the Bureau of Biological Survey, I take pleasure in releasing \$4,000 of this to be added to the present allotment for Federal work in your state.

How Local Associations and Counties Can Secure Federal and State Assistance

Under the California law providing for the control and destruction of predatory animals, the Director of the State Department of Agriculture is authorized to accept on behalf of the state, donations of money from individuals, associations, corporations, county boards of supervisors and other agencies interested in the con-

trol of coyote and other harmful predatory animals, all such moneys to be credited to the predatory animal control fund. Money accepted for this work is to be expended in localities where the donors are interested.

Eliminates Bounties Except for Mountain Lion

The law further provides that all acts relating to the payment of bounties by the state are repealed except for the payment of bounties on mountain lions.

Counties Take Up Work

Owing to the limited funds available for the predatory animal control work, it has been the policy of those in charge only to place the paid hunters and trappers in those counties or sections giving financial assistance. For example, Humboldt County has appropriated \$2,500; Mendocino, \$5,000; Lake, \$2,000; Napa, \$1,500; Tehama, \$5,000; Lassen, \$2,000; Colusa, \$1,500; Glenn \$1,200; for the coming year with several other counties making plans to take up the work in the near future.

New System Effective

The Board of Supervisors of Napa County, in a recent letter to the California Wool Growers Association, wrote as follows:

"Napa County, during the period from 1900 to 1920, paid on an average of \$1,800 per year for the destruction of coyotes, the county paying a bounty of \$10 per head for each coyote destroyed during that time.

"Since 1920 Napa County has paid the Bureau of Biological Survey of the Federal Government the annual sum of \$1,500, the Federal Government and the State Department disbursing a like amount for the destruction of coyotes and other predatory animals and by this method this expenditure of \$4,500 within the county each year is rapidly depleting the supply of coyotes.

"In the northern part of the county where coyotes were very destructive to lambs, kids, small pigs and poultry, particularly turkeys, no losses are now reported by the farmers and stockmen, and the herds are left out

on the ranges at night without any disturbance or loss."

ACTIVITIES OF PACKERS AND STOCKYARDS ADMINISTRATION

No decision or report of findings has yet been issued in connection with the hearings held on the charges made some months ago against the Wool Growers Commission Company at Chicago. The Government officials advise that unavoidable delay has been occasioned by legal aspects of the case and that their full report will be published soon.

In the general audit of the books of the livestock commission houses, made last spring, several serious irregularities were disclosed at the St. Paul market. The Packers and Stockyards Administration has agreed to co-operate with the livestock exchanges at the various markets and has furnished to them such information as it obtains regarding irregularities of exchange members. On the basis of information so received the St. Paul Livestock Exchange acted in the way of discipline by fines, suspension or expulsion of the following members: Campbell Commission Company; Chandler & Yost; Drovers Commission Company; Farmers Commission Company; Gibbons & Carrues Company; Independent Commission Company; Joyce Commission Company; McKisick, Alcorn & Magnus Company; Rogers, Amundson Company; South St. Paul Commission Company; United Commission Company; and Percy Vittum Commission Company.

The members of the South St. Paul Livestock Exchange who were fined and suspended by the stockyards company are still under suspension and none of the principals of these firms have been allowed by the stockyards company to renew their activities at the market.

The Packers and Stockyards Administration's auditors have also recently made an audit of all market agencies at Kansas City with the view of disclosing any violations of the regulations of the Department of Agri-

culture or of the rules of the livestock exchange. Of the 61 firms examined there were three who had weighed up stock to themselves or their employes without making the fact known to the shippers. The attention of each of these firms was called to the regulation forbidding this practice and all of them agreed to abide by it in the future. In nearly all of these particular cases the commission company had again weighed the stock to one of its customers, charging commission both for selling and buying. This is a violation of the livestock exchange rules and, in accordance with the waiver secured from members some time ago, the information was turned over to the president of the exchange. The offenders will be given a hearing in the near future by the exchange. The audit also developed the fact that four other firms had failed to establish a separate feed account in accordance with instructions from Washington. In each of these instances the auditor making the check arranged for the immediate establishment of a separate feed account.

Approval of the practice of having the price at which live stock is sold placed on scale tickets by the market agencies at the time of weighing has also been secured from the directors of the livestock exchange at one of the markets. The supervisor has taken the matter up with the firms who are not members of the exchange and the plan has also been approved by all of these agencies. In view of the approval of this plan by the different groups at the market, the supervisor requested the president of the stockyards company to put the plan into effect July 23, 1923, and it appears to be working satisfactorily.

Hearings on the complaint issued by the Secretary of Agriculture against the merger of the Armour and Morris meat packing companies opened at Kansas City, Mo., on April 30th. The hearings were continued at East St. Louis on May 7th, South Omaha on May 10th, and were resumed at Chicago on June 18th and adjourned until September 11th.

THE RAM SALE

The results of the ram sale give ample proof that no inflation tactics are being employed in the Western sheep business. There was a large offering of excellent sheep and a good attendance of buyers. The latter, however, seemed dominated by the need of keeping values low and their competition was not sufficiently strong to maintain prices at the level recorded last year. Hampshires fared better than Rambouillets in maintaining an average practically equal to that of 1922, while the Rambouillets fell off materially. The Hampshire advantage, especially in the case of studs, was largely due to the methods of the consignors, who decided to offer as single stud rams only a few of their more select individuals. Only twenty head were sold as individuals, while the Rambouillet consignors brought in 98 single rams and combined into small pens a number of others which they had expected to sell as single lots.

It has become apparent that the interests of all connected with the sale require that only a few of the choicer and very high class individual rams should be offered as single lots. Just how the necessary reduction is to be

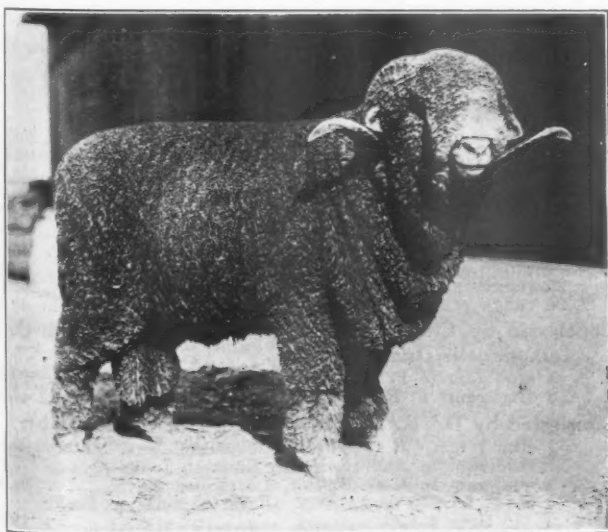
brought about has not been determined. Examination by a sifting committee in advance of the sale seems impracticable, and any arbitrary ruling as to the number of single rams admitted for each consignor might do injustice in some cases and in others admit unworthy animals. The most practicable suggestion that has been made is that of charging a minimum fee of \$20 per head for each animal catalogued for sale as a single ram. The present minimum fee is \$7.50, in contrast to the regular five per cent charged by the association on all other lots. In the case of rams bringing as much as \$400 the extra fee would mean that no extra charge would be made upon the seller over the regular rate of commission. The proposed rule, however, would prevent the listing as single rams of individuals not likely to bring as much as \$300 or \$400 each.

A distinct advance was made in the handling and selling of rams developed upon the range and in condition for range service without requiring such special care or feeding as is desirable in the case of more highly fitted sheep. The unhoused rams were held in open pens outside the regular

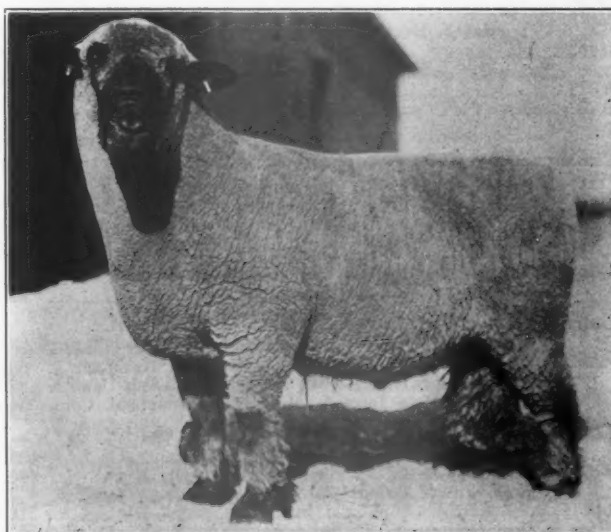
sale barn and in selling they followed each other through the ring. In other years the owners of such stock have drawn for their position in the selling order and it frequently happened that offerings of strictly range rams came into the ring between lots that had been brought into high condition. This was unfair to owners of both classes of stock and usually resulted in the discrimination against unfitted rams coming into the ring after pens of housed and fitted entries. This year the range section was headed in the ring by a pen of 25 yearling rams from the Grand Canyon Sheep Company of Arizona. These had been shorn last spring and held upon the range until shipping time. The first pen was sold at \$35 per head and the buyer, Mr. Joe Saval of Battle Mountain, Nevada, exercised the privilege of taking the entire lot of 75 head.

The pen of the Cunningham Sheep Company's rams presented in range condition but without having been shorn, also brought \$35 each and the entire lot of 101 head was taken by Mr. Jeter Arnold of Manzanola, Colo.

While it is advocated by some that there should be a reduction in the number of rams admitted to the sale,



The top Rambouillet stud ram. Bred by Wm. Millard of Mt. Pleasant, Utah, and sold to Day Farms Company, Parowan, Utah, at \$800.



The top Hampshire of the sale, King Targhee I-44572. Sold by H. L. Finch to the Wood Livestock Company for \$775.

it seems likely that the unhoused section can be built up in a way that will greatly serve buyers of such rams and at the same time permit of handling considerable numbers without using any great amount of time in the auction ring.

Fifteen head of Lincolns and 30 Cotswolds were sufficient to supply the demand for long-wooled sheep. A Corriedale offering of good quality received no bids, while Mr. Laidlaw's pen of 25 strong-boned and growthy Panama yearlings were taken at \$35 each. The sale demand does not indicate any return to the cross-bred type of range ewe or the use of long-wool blood in maintaining the desirable qualities formerly sought for by

cross-breeding to produce stock ewes. It would appear as though the range flocks were running strongly to the fine-wool type. Future need for cross-bred wool, or considerations of lamb yields and prices may bring a demand for long-wool blood, but if so, it seems certain that no material supply will be available when that demand comes.

THE SUMMARY

Rambouillets

98 single rams sold at an average of \$153.84.

132 stud rams, sold in pens of from three to nine head, averaged \$161.84.

1,321 range rams averaged \$41.46, as compared to an average of \$57 on 862 head in 1922.

The total of 230 stud rams averaged \$108.66, as compared with \$182.41 for 120 head in 1922.

Hampshires

20 single rams averaged \$210.25.

78 stud rams, sold in pens of from three to nine, averaged \$69.25.

519 range rams made an average of \$40.33, in comparison with \$42.25 for 391 head in 1922. The total of 98 stud rams sold at an average of \$139.75, as compared with \$117.02 for 42 head in 1922.

An average of \$47 was obtained for 15 Lincoln rams. A few Cotswolds, mainly two years old, brought \$26 each. Two Suffolk stud rams brought \$150 each and 12 others \$53 each.



Some of the Grand Canyon yearling range rams. Sold as a lot of 75 to Joe Saval of Nevada.



Pen of five Hampshire studs sold by H. L. Finch to Wood Live Stock Company at \$210 each.

THE SALES IN DETAIL

RAMBOUILLETS

Price per Head

Consigned by C. S. Arn, Kenton, Ohio:

1 stud ram to L. B. Nielson, Ephraim, Utah	\$75.00
1 stud ram to Andrew Little, Emmett, Idaho	60.00
1 stud ram to P. C. Oldroyd, Fountain Green, Utah..	50.00
2 stud rams to J. N. Smith, Cedar City, Utah	35.00

Consigned by Hyrum Bosen, Ephraim, Utah:

12 range rams to Ed. Lewis, Jensen, Utah	32.00
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Consigned by Wm. Briggs & Son, Dixon, Calif.:

1 stud ram to Wood Live Stock Co., Spencer, Idaho..	125.00
1 stud ram to Edward Sargent, Chama, N. M.	80.00
5 stud rams to LaSal Live Stock Co., LaSal, Utah....	67.50
13 range rams to John A. McKnight, Montrose, Colo.	50.00

Consigned by Bullard Bros., Woodland, Calif.:

1 stud ram to Manti Live Stock Co., Manti, Utah	400.00
1 stud ram to L. N. Marsden, Parowan, Utah	260.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Ariz ..	210.00
1 stud ram to W. T. Hall, Manti, Utah	165.00
5 stud rams to Edward Sargent, Chama, N. M.	80.00
25 range rams to Xavier Servel, Pocatello, Idaho	46.00
25 range rams to A. R. Buckley, Hartsel, Colo.	45.00

Consigned by W. D. Candland, Mt. Pleasant, Utah:

1 stud ram to F. D. Gunn, Elsinore, Utah	205.00
1 stud ram to LaSal Live Stock Co., LaSal, Utah	165.00
1 stud ram to Alfred Bellander, Baker, Nev.	150.00
1 stud ram to John Jensen, Moroni, Utah	100.00
5 stud rams to Colin Campbell, Ask Fork, Ariz.	82.00
5 range rams to A. H. Anderson	50.00
20 range rams to Edward Sargent, Chama, N. M.	43.00
25 range rams to Jeter Arnold, Manzanola, Colo.	70.00
25 range rams to Jeter Arnold, Manzanola, Colo.	52.50
26 range rams to Sutton & Eliason, Grantsville, Utah	46.00

Consigned by Cherry Hill Farm (Jno. E. Webb & Co.), Indianapolis, Ind.:

1 stud ram to P. D. Neer, Twin Falls, Idaho	90.00
3 stud rams to Richard Staley, Upton, Utah	47.00

Consigned by Dr. K. M. Christensen, Bountiful, Utah:

1 stud ram to J. G. Taylor, Lovelocks, Nev.	95.00
1 stud ram to Andrew Little, Emmett, Idaho	75.00
1 stud ram to J. G. Taylor, Lovelocks, Nev.	65.00
4 stud rams to George L. Clark, American Fork, Utah ..	45.00

Consigned by Clark & Co., Buhl, Idaho:

1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona ..	165.00
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1 stud ram to Edward Sargent, Chama, N. M.	125.00
1 stud ram to J. G. Taylor, Lovelocks, Nev.	65.00
22 range rams to Edward Sargent, Chama, N. M.	50.00

Consigned by Coiner Bros., Hansen, Idaho:

19 range rams to Xavier Servel, Pocatello, Idaho.....	30.00
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Consigned by J. E. Corbett & Sons, Bancroft, Idaho:

25 range rams to Pierre Servel, Pocatello, Idaho	31.00
25 range rams to D. H. Adams, Layton, Utah	28.00

Consigned by Cunningham Sheep Co., Pendleton, Ore.:

101 range rams to Jeter Arnold, Manzanola, Colo.	35.00
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Consigned by John Curran, Hagerman, Idaho:

77 range rams to Lindsay Land & Live Stock Co.	32.50
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Consigned by Day Farms Co., Parowan, Utah:

1 stud ram to J. G. Taylor, Lovelock, Nev.	90.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	60.00
3 stud ewes to R. E. L. Kenner, Manti, Utah	50.00
8 stud rams to Colin Campbell, Ask Fork, Ariz.	62.50
21 range rams to Moynier Bros. and August Raynier, Price, Utah	36.00

25 range rams to D. H. Adams, Layton, Utah	40.00
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25 range rams to Wright & Wright, Salt Lake City	34.00
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25 range rams to Arizona Live Stock Co., Seligman, Arizona	30.00
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Consigned by Gillett Sheep Co., Castleford, Idaho:

1 stud ram to John W. Shand, Manti, Utah	305.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	200.00
1 stud ram to J. G. Taylor, Lovelocks, Nevada	130.00
1 stud ram to A. E. Ross, Rupert, Idaho	105.00
25 range rams to Edward Sargent, Chama, N. M.	56.00
25 range rams to Colin Campbell, Ask Fork, Ariz.	38.00

Consigned by Grand Canyon Sheep Co., Flagstaff, Ariz.:

75 range rams to Joe Saval, Battle Mountain, Nev.	35.00
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Consigned by W. S. Hansen, Collinston, Utah:

1 stud ram to Honore Dusserre, Price, Utah	105.00
1 stud ram to P. C. Oldroyd, Fountain Green, Utah	75.00
5 stud rams to A. H. Anderson, Salt Lake City, Utah	60.00
18 range rams to W. O. Collard, Salt Lake City....	53.00
25 range rams to D. W. Cook, Logan, Utah	40.00

Consigned by E. R. Hobbs, Castleford, Idaho:

1 stud ram to Albert Campbell, New Meadows, Ida.	105.00
1 stud ram to E. J. Wagner, Lamar, Colo.	70.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	70.00
2 stud rams to Grand Canyon Sheep Co., Flagstaff, Arizona	65.00
25 range rams to Wood Live Stock Co., Spencer, Ida.	37.50

Consigned by R. A. Jackson, Dayton, Wash.:

73 range rams to Jeter Arnold, Manzanola, Colo.	14.00
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Consigned by Justaplain Farm (L. F. Fairbanks), Milford Center, Ohio:

1 stud ram to Day Farms Co., Parowan, Utah	165.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	90.00

Consigned by King Bros. Co., Laramie, Wyo.:

1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	115.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	105.00
1 stud ram to Gillett Sheep Co., Castleford, Idaho	62.50

Consigned by Knollin-Hansen Co., Soda Springs, Idaho:

25 range rams to John C. Mackay, Salt Lake City, Ut.	30.00
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Consigned by Carl Lindheimer, Woodland, Calif.:

5 stud rams to Andrew Manmotes, Price, Utah	50.00
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Consigned by Loamland Farm (Geo. M. Lincoln), North Lewisburg, Ohio:

1 stud ram to E. R. Hobbs, Castleford, Idaho	50.00
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Consigned by G. W. McGinnis, Castleford, Idaho:

1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	85.00
25 range rams to A. R. Buckley, Hartsel, Colo.	40.00

Consigned by Mt. Pleasant Rambouillet Farm (J. K. Madson), Mt. Pleasant, Utah:

1 stud ram to Quealy Sheep Co., Cokeville, Wyo.	375.00
1 stud ram to Bullard Bros., Woodland, Calif.	200.00

1 stud ram to F. Horace Gunn, Richfield, Utah	175.00
1 stud ram to Andrew Little, Emmett, Idaho	65.00
5 stud rams to J. J. Stillman, Sugar House, Utah	72.50
5 stud ewes to L. N. Marsden, Parowan, Utah	65.00
9 stud ewes to King Bros. Co., Laramie, Wyo.	52.50
10 range rams to John G. Sevy, Salt Lake City, Utah	56.00
24 range rams to J. G. Taylor, Lovelock, Nev.	64.00

Consigned by J. E. Magleby & Sons, Monroe, Utah:

5 stud rams to Colin Campbell, Ask Fork, Ariz.	70.00
8 range rams to J. G. Taylor, Lovelocks, Nev.	32.50
25 range rams to Arizona L. S. Co., Seligman, Ariz.	27.00

Consigned by L. N. Marsden, Parowan, Utah:

1 stud ram to Wood Live Stock Co., Spencer, Idaho	200.00
1 stud ram to Dell Singleton, American Fork, Utah	140.00
1 stud ram to Colin Campbell, Ask Fork, Ariz.	125.00
5 stud rams to Colin Campbell, Ask Fork, Ariz.	105.00
2 stud rams to J. N. Smith, Cedar City, Utah.....	60.00
5 stud ewes to Xaier Servel, Pocatello, Idaho	44.00

Consigned by W. J. Mathews, McGuffey, Ohio:

1 stud ram to W. W. Pendleton, Parowan, Utah	105.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	90.00

Consigned by G. N. Merritt & Sons, Woodland, Calif.:

1 stud ram to Wood Live Stock Co., Spencer, Idaho	140.00
1 stud ram to Andrew Little, Emmett, Idaho	100.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	85.00
19 range rams to Xavier Servel, Pocatello, Idaho	35.00
25 range rams to Austin Bros., Salt Lake City, Utah	38.00

Consigned by C. D. Michaelson, Gunnison, Utah:

1 stud ram to L. B. Nielson, Ephraim, Utah	155.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	110.00
19 range rams to Arizona Live Stock Co., Seligman, Arizona	44.00

Consigned by Wm. Millar, Mt. Pleasant, Utah:

1 stud ram to Day Farms Co., Parowan, Utah	800.00
1 stud ram to Clive Winget, Monroe, Utah	180.00
1 stud ram to W. D. Candland & Son, Mt. Pleasant, Utah	160.00
1 stud ram to Dr. K. M. Christensen, Bountiful, Ut.	160.00
1 stud ram to W. D. Candland & Sons, Mt. Pleasant, Utah	150.00
5 stud rams to Grand Canyon Sheep Co., Flagstaff, Arizona	90.00
25 range rams to A. O. Vaughn, Montrose, Colo.	52.00

Consigned by J. M. Moran, Starbuck, Wash.:

5 stud rams to Geo. L. Clark, American Fork, Utah	62.50
5 stud ewes to King Bros. Co., Laramie, Wyo.	30.00
21 range rams to Andrew Little, Emmett, Idaho	23.80
25 range rams to J. D. Little, Howe, Idaho	40.00

Consigned by F. J. Neilson, Mt. Pleasant, Utah:

1 stud ram to Andrew Little, Emmett, Idaho	305.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	110.00
12 range rams to Colin Campbell, Ask Fork, Ariz.	52.50

Consigned by L. B. Nielson, Ephraim, Utah:

1 stud ram to C. D. Michaelson, Gunnison, Utah	150.00
1 stud ram to Stevens Bros., Ephraim, Utah	110.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	110.00
1 stud ram to Stevens Bros., Ephraim, Utah	100.00
1 stud ram to G. A. Hanson, Ephraim, Utah	100.00
10 range rams to Grand Canyon Sheep Co., Flagstaff, Arizona	50.00
23 range rams to Wright Bros., Salt Lake City, Utah	40.00

Consigned by Chas. Olsen, Ephraim, Utah:

1 stud ram to L. B. Nielson, Ephraim, Utah	85.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	85.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	65.00
2 stud rams to Grand Canyon Sheep Co., Flagstaff, Arizona	100.00
16 range rams to Arizona Live Stock Co., Seligman, Arizona	38.00

Consigned by Orth Bros., McGuffey, Ohio:

1 stud ram to John H. Seely & Sons, Mt. Pleasant, Utah	300.00
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1 stud ram to G. N. Merritt & Sons, Woodland, Cal.	260.00
1 stud ram to Wm. Briggs & Son, Dixon, Calif.	250.00
1 stud ram to Andrew Little, Emmett, Idaho	95.00
1 stud ram to Colin Campbell, Flagstaff, Ariz.	65.00

Consigned by H. G. Peckham, Wilder, Idaho:

25 range rams to G. W. Bond, Lamar, Colo.	26.00
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Consigned by W. C. Pendleton, Parowan, Utah:

1 stud ram to Edward Sargent, Chama, N. M.	80.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	75.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	70.00
2 stud rams to Wood Live Stock Co., Spencer, Idaho	70.00
8 range rams to Honore Dusserre, Price, Utah	56.00

Consigned by W. W. Pendleton & Son, Parowan, Utah:

1 stud ram to J. G. Taylor, Lovelocks, Nev.	105.00
1 stud ram to J. G. Taylor, Lovelocks, Nev.	90.00
5 stud rams to Boise Wells, American Fork, Utah	86.00
20 range rams to J. E. Ostler, Nephi, Utah	37.00

Consigned by Quealy Sheep Co., Cokeville, Wyo.:

1 stud ewe to J. K. Madsen, Mt. Pleasant, Utah	155.00
1 stud ram to Honore Dusserre, Price, Utah	105.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	85.00
1 stud ram to Bullard Bros., Woodland, Calif.	75.00
1 stud ram to King Bros. Co., Laramie, Wyo.	75.00
1 stud ram to Clark & Co., Buhl, Idaho	50.00
4 stud ewes to R. E. L. Kenner, Manti, Utah	50.00
5 stud rams to Honore Dusserre, Price, Utah	60.00
14 range rams to Bertagnoli Bros., Salt Lake, Utah	40.00
20 range rams to R. E. L. Kenner, Manti, Utah	35.00
25 range rams to Arizona Live Stock Co., Seligman, Arizona	41.00
25 range rams to Arizona Live Stock Co., Seligman, Arizona	41.00

Consigned by Rambledale Farm (Dwight Lincoln), Marysville, Ohio:

1 stud ram to E. R. Hobbs, Castleford, Idaho	75.00
1 stud ram to Charles Olsen, Ephraim, Utah	75.00
3 stud rams to L. N. Marsden, Parowan, Utah	65.00

Consigned by Mountain Dell Farm (John H. Seely & Sons Co.), Mt. Pleasant, Utah:

1 stud ram to Quealy Sheep Co., Cokeville, Wyo.	500.00
1 stud ram to W. D. Candland & Sons, Mt. Pleasant, Utah	310.00
1 stud ram to Grand Canyon Sheep Co., Flagstaff, Arizona	290.00
1 stud ram to King Bros. Co., Laramie, Wyo.	150.00
1 stud ram to August Reynier, Price, Utah	90.00
6 stud ewes to Wm. Millar, Mt. Pleasant, Utah	50.00
25 range rams to Poulson & Meyrick, Mt. Pleasant, Utah	65.00
25 range rams to Ray Holman, Fountain Green, Utah	53.00
25 range rams to John A. McKnight, Montrose, Colo.	46.00

Consigned by University Farm (University of California), Davis, Calif.:

1 stud ram to P. E. Anderson, Provo, Utah	115.00
1 stud ram to Andrew Little, Emmett, Idaho	100.00

Consigned by University of Idaho, Moscow, Idaho:

1 stud ram to F. J. Neilson, Mt. Pleasant, Utah	135.00
1 stud ram to John H. Seely & Sons, Mt. Pleasant, Utah	100.00
9 range rams to Edward Sargent, Chama, N. M.	51.00

Consigned by University of Illinois, Urbana, Ill.:

1 stud ram to Bullard Bros., Woodland, Calif.	625.00
1 stud ram to C. D. Michaelsen, Gunnison, Utah	155.00
1 stud ram to Alfred Bellander, Baker, Nevada	145.00
2 stud rams to E. C. Berlingame, Walla Walla, Washington	70.00

Consigned by U. S. Sheep Experiment Station, Dubois, Idaho:

5 stud rams to Geo. L. Clark, American Fork, Utah	64.00
10 range rams to Colorado Land & Live Stock Co., Hartsel, Colo.	56.00
24 range rams to Jeter Arnold, Manzanola, Colo.	40.00

HAMPSHIRE**Consigned by J. E. Ballard, Weiser, Idaho:**

1 stud ram to J. J. Craner, Corinne, Utah	160.00
1 stud ram to J. E. Morse, Dillon, Mont.	100.00
1 stud ram to S. Grover Rich, Burley, Idaho	50.00
1 stud ram to W. B. Erekson, Murray, Utah	50.00
4 stud rams to Lafe Bown, Provo, Utah	36.00
5 stud rams to Austin Bros., Salt Lake City, Utah	34.00
10 range rams to J. S. Bartholomew, Ephraim, Utah	27.00

Consigned by Robert S. Blastock, Filer, Idaho:

9 stud rams to Colorado Land & Live Stock Co., Hartsel, Colo.	65.00
10 stud ewes to J. W. Shand, Manti, Utah	32.50
10 stud ewes to P. C. Madsen, Manti, Utah	32.50
25 range rams to Colorado Land & Live Stock Co., Hartsel, Colo.	52.00

Consigned by W. B. Erekson, Murray, Utah:

4 stud rams to Austin Bros., Salt Lake City, Utah	28.00
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Consigned by H. L. Finch, Soda Springs, Idaho:

1 stud ram to Wood Live Stock Co., Spencer, Idaho	775.00
1 stud ram to James Laidlaw, Muldoon, Idaho	460.00
1 stud ram to Wood Live Stock Co., Spencer, Idaho	310.00
1 stud ram to J. E. Morse, Dillon, Mont.	305.00
5 stud rams to Wood Live Stock Co., Spencer, Idaho	210.00
8 range rams to Albert Campbell, New Meadows, Idaho	162.50

Consigned by Chas. Howland, Cambridge, Idaho:

1 stud ram to Albert Campbell, New Meadows, Ida.	85.00
5 stud rams to J. W. Beck, American Fork, Utah	51.00
18 range rams to Lafe Bown, Provo, Utah	37.00
18 range rams to Austin Bros., Salt Lake City, Utah	36.00
25 stud ewes to W. A. Briggs, Dixon, Calif.	27.50

Consigned by Knollin-Hansen Co., Soda Springs, Idaho:

5 range rams to John C. Mackay, Salt Lake, Utah	30.00
10 range rams to G. W. Bond, Lamar, Colo.	31.00
29 range rams to John Armstrong, Ephraim, Utah	29.00
30 range rams to Austin Bros., Salt Lake City, Utah	32.00

Consigned by Laidlaw & Brockie, Muldoon, Idaho:

25 range rams to Jeter Arnold, Manzanola, Colo.	35.00
26 range rams to Dell Singelton, American Fork, Ut.	40.00

Consigned by J. Nebeker & Son, Laketown, Utah:

5 stud rams to A. R. Buckley, Hartsel, Colo.	60.00
5 stud rams to F. R. Sprague, Wells, Nev.	52.00
29 range rams to Fred A. Flodder	40.00
30 range rams to Hanson & Armstrong, Ephraim, Utah	43.00
31 range rams to Wm. Coleman, Heber City, Utah	38.00

Consigned by Selway & Gardiner, Anaconda, Mont.:

1 stud ram to Eureka Land & Stock Co., Eureka, Nevada	225.00
1 stud ram to University of Illinois, Urbana, Ill.	75.00
8 stud rams to A. R. Buckley, Hartsel, Colo.	75.00
1 range ram to University of Illinois, Urbana, Ill.	36.00
5 range rams to Andrew Little, Emmett, Idaho	35.00
11 range rams to Andrew Little, Emmett, Idaho	51.00
13 range rams to John McMurray, Oakley, Idaho	36.00
20 range rams to U. S. Sheep Experiment Station, Dubois, Idaho	58.00
25 range rams to J. G. Taylor, Lovelocks, Nev.	61.00
25 range rams to Geo. L. Clark, American Fork, Utah	55.00
25 range rams to Austin Bros., Salt Lake City, Utah	38.00
25 range rams to James Farmer, Bliss, Idaho	36.00

Consigned by Straloch Farms (Harold Hopkins), Davis, Calif.:

1 stud ram to Wood Live Stock Co., Spencer, Idaho	175.00
1 stud ram to Frank H. Means, Saguache, Colo.	110.00
1 stud ram to Pierre Servel, Pocatello, Idaho	85.00
1 stud ram to A. C. Thompson, Gooding, Idaho	80.00
5 range rams to A. R. Buckley, Hartsel, Colo.	45.00

Consigned by Thousand Springs Farm (Mrs. Minnie W. Miller), Wendell, Idaho:

1 stud ram to J. Nebeker & Son, Laketown, Utah	360.00
1 stud ram to Wood Live Stock Co., Spencer, Idaho	325.00
1 stud ram to Knollin-Hansen Co., Soda Springs, Idaho	225.00

1 stud ram to Eugene Luney, Boise, Idaho	150.00
1 stud ram to Knollin-Hansen Co., Soda Springs, Idaho	135.00
5 stud rams to James Laidlaw, Muldoon, Idaho	102.50
Consigned by University of Idaho, Moscow, Idaho:	
1 stud ram to J. E. Morse, Dillon, Mont.	100.00
4 stud rams to S. Grover Rich, Burley, Idaho	80.00
Consigned by Wood Live Stock Co., Spencer, Idaho:	
6 range rams to G. W. Bond, Lamar, Colo.	51.00
19 range rams to Lefe Bown, Provo, Utah	48.00
24 range rams to Ercanbrack & Lewis, Provo, Utah	48.00
25 range rams to G. W. Bond, Lamar, Colo.	49.00
25 range rams to J. D. Little, Howe, Idaho	42.00

LINCOLNS

Consigned by S. W. McClure, Bliss, Idaho:	
1 stud ram to D. B. Drake, Challis, Idaho	50.00
1 stud ram to Claud Burch, Provo, Utah	42.50
3 stud rams to Claud Burch, Provo, Utah	43.00
Consigned by University of Idaho, Moscow, Idaho:	
1 stud ram to D. B. Drake, Challis, Idaho	65.00
1 stud ram to D. B. Drake, Challis, Idaho	55.00
8 stud rams to Claud Burch, Provo, Utah	45.00

SUFFOLKS

Consigned by Robert S. Blastock, Filer, Idaho:	
4 stud rams to James Laidlaw, Muldoon, Idaho	60.00
8 range rams to G. W. Bond, Lamar, Colo.	50.00
Consigned by University of Idaho, Moscow, Idaho:	
1 stud ram to James Laidlaw, Muldoon, Idaho	150.00
1 stud ram to James Laidlaw, Muldoon, Idaho	150.00

COTSWOLDS

Consigned by J. E. Magelby & Sons, Monroe, Utah:	
9 range rams to R. W. Brown, Grantsville, Utah	26.00

PANAMAS

Consigned by Laidlaw & Brockie, Muldoon, Idaho:	
26 range rams to D. B. Drake, Challis, Idaho	35.00

CROSS-BREDS—(Hampshire-Suffolk)

Consigned by Laidlaw & Brockie, Muldoon, Idaho:	
25 range rams to John Armstrong, Ephraim, Utah ..	50.00

THE AUSTRALIAN RAM SALES

The historic and notable Australian ram sale annually held at Sydney took place during the first week of July. The Pastorial Review reports that the effects of the recent drought were visible in many of the offerings. However, five Merinos brought over \$3,000 each. Of these two were sold by Mr. F. B. S. Falkiner for \$3,750 and \$3,625. The Austin Wanganella Company sold two spe-

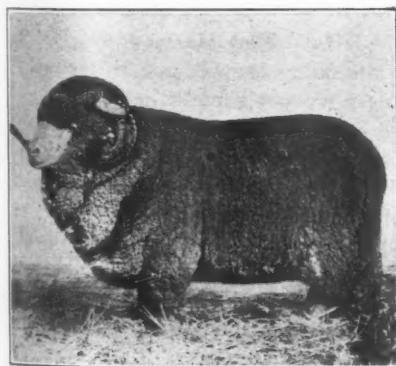
about \$450 each, while 1,525 head listed as 'Selected' averaged about \$76 each.

For several years the Sydney ram sales took precedence over any of all shows held in Australia. During recent years, however, a special effort has been made to build up a strong annual show of breeding stock. This year's show was held at Sydney just prior to the annual sale. In both the show and the sale a sharp distinction is made in the classes for housed and unhoused sheep. In writing of the show the correspondent of the Pastorial Review states: "The housed section found little support, and when one considers the excellent Australian climate and the Merino sheep market, one can easily understand the falling off in these classes." Champions in the housed and unhoused sections are pitted against each other for the grand championship. This award was won for rams by an animal exhibited in the unhoused class and the 'medium wool' section. The Australian show classification divides Merinos into three sections, known respectively as fine wool, medium wool, and strong wool.

VIRGIN WOOL CONTROVERSY

I have received several communications from the Carded Woolen Manufacturers Association containing their side of the virgin wool controversy. Some of them may appear perfectly reasonable to them, but very unreasonable to the grower, and of late they have not only been unreasonable, but damnably unfair.

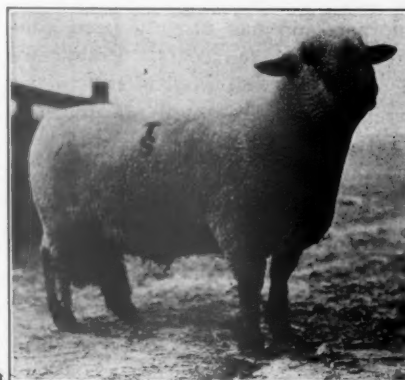
Some months ago I had a communication in which the fact that wool sorters contracted anthrax or some other disease, was given as an arraignment of virgin wool, and now a few days ago I am in receipt of the copy of a letter dated April, 1920, to Hon. John J. Esch, containing the picture of a man clad in nature's allotment of wool, which happily consists of a pair of pants somewhat abbreviated to be sure, but the fact that the man is



Champion ram, fine-wool section of unhoused department at the Sydney show. The champion of all sections and departments was an unhoused ram shown in the Merino medium wool section by C. Mills, New South Wales.

cial stud rams for \$3,250 each. As reported by our Australian correspondent, Corriedales were in strong demand. The British long-wool breeds, however, met a reception that was somewhat different.

The reports of the Sydney sale show that 375 Merino stud rams averaged



The Thousand Springs Farm top stud ram sold to J. Nebeker & Son at \$360.

wearing them shows him to be a person of some importance in his own family.

A little further on in the same letter there is a statement to the effect that the promoters of these bills have the effrontery to call them "truth in fabric laws." I am glad to get that word effrontery, for a little further on there is a pile of tags under which is written, "A pile of Virgin Wool."

"It consists of 90 per cent of sheep dung and 10 per cent of wool fibre; which, when reclaimed from the filth, is greatly inferior to much of the material classed as shoddy."

This bunch of shoddy users, "me-thinks they doth protest too much," as Shakespeare says, have the effrontery to take poor old Betsy's dung locks, which providence gave her no way of getting rid of, and which they undoubtedly got for nothing under the "one per cent deduction made for tags," and trot them out as a sample of virgin wool. The highly enlightened and highly paid writer for the Carded Woolen Manufacturers also says:

"The wool growers of the far West

deserve sympathy rather than censure. They are victims of weak, ignorant, and avaricious leadership, such as has marked their leadership for the past 55 years."

"Wow! Wow!" and "Wow!" again. Page Gooding and Hagenbarth, Doc. Wilson and McClure.

Again the learned writer retained for the Carded Woolen Manufacturers says:

"The dishonest manufacturer could place the virgin wool label on goods made of say 75 per cent of reclaimed wool."

I think if the bunch was scoured the shrinkage would run just a little higher, perhaps 20 per cent honest.

Hugh Sproat.

The prospects are not good for fall feed. This is discouraging, as is also the fact that there are no wool sales.

J. C. Moore.

CALIFORNIA

About four-fifths of the lambs have been shipped. We have about the same number to market this fall as we had a year ago. None of the sheepmen here are retaining any of their ewe lambs to increase their bands. No sales of breeding ewes are reported, but aged ewes can be had at \$5 a head. Nine cents has recently been paid for feeder lambs. The prospects for the winter range are only fair.

Ventura, Calif. A. L. Hobson.

UTAH Beaver

Nearly all of the lambs in Beaver County have been contracted. Ten cents per pound has been paid for feeder lambs delivered at Milford. Very few breeding ewes are changing hands, although some aged ewes are selling around \$5 a head. The fall range is in fine condition.

John H. Barton.

* * *

New Harmoy

The fall range will not be very good unless we get some rain. Our lambs are just as good as they were last year. Very few of them have been marketed. Nine and a half cents has been offered for feeder lambs. No ewes of any kind have been changing hands here. A good many ewe lambs will be kept for breeding purposes.

I think we should have some sort of leasing law on open or Government grazing lands, as such lands are overstocked.

Albert F. Mathis.

* * *

Price

Ten and a quarter cents has been paid for feeder lambs here. About half of our lambs have already been marketed. Some aged ewes have been sold recently from \$4 to \$4.50 per head.

The prospects for feed on the fall range are very bad. W. A. Lowry.

(Continued on page 27.)

Around the Range Country

NEW MEXICO

The summer range has been fairly good, although some districts have been very dry. The volume of lamb shipments will be about 25 per cent greater than a year ago. About 75 per cent of the lamb crop goes to Colorado and has already been contracted for at ten cents. Practically all of the Roswell wool is still in the warehouse unsold.

A. D. Jones.

Tatum, N. M.

WYOMING

About 20 per cent of the lambs has been contracted for. There will be a 40 per cent increase in the number of lambs marketed. Recently some feeder lambs have been sold at from ten to ten and a half cents. No breeding ewes are changing hands, but some aged ones are moving at \$4. Ewe lambs are being held back to build up the breeding bands. The prospects for the feed on the fall range are good.

J. D. Alexander.

Douglas, Wyo.

IDAHO

The feed on the fall range is better than I have ever seen it, and the business of raising sheep is taking on a more cheerful aspect. However, in this section there are no wool pools

and I think the sheepmen are losing money by not forming one.

About two-thirds of the lambs have already been marketed. The number to be sold is about what it was last year, in spite of the fact that we are holding our ewe lambs back. Some feeder lambs have been sold at from 9 to 10 cents. Yearling ewes are also reported to be changing hands at \$10.

Howe, Idaho.

L. A. Sermon.

OREGON

Umpqua

The summer range has been better than for several years past. The coyotes, however, are worse. They seem to be coming in from other localities. Some ewes of mixed ages and breeding have been sold at prices ranging from \$5 to \$8. We usually ship most of our lambs to Idaho points for feeding, and this year there will be about one-third more to go than in 1922.

L. V. Emery.

* * *

Mt. Vernon

There is no movement in lambs yet. No contracts have been made and no feeder lambs or ewes of any kind have been sold. I think a good many of the ewe lambs will be retained for the flocks.

Economical Rations For Wintering Ewe Lambs

Comparison of Values of Hay, Oat Straw, Oats, and Wheat Screenings—Prices at Which Each Most Profitably Used.

By W. E. JOSEPH, Montana Experiment Station.

The cost of winter feeding range sheep is one of the large items in the cost of production of wool and lambs. Any method of feeding, which will reduce the cost of carrying ewes or ewe lambs through the winter feeding season, increases the margin of profit.

During the last two winters, the Montana Experiment Station has been doing some work on the feed requirements for wintering range ewe lambs and range ewes. In the late fall of 1921, 380 ewe lambs that had been bred and raised on the range were placed on a dry land ranch near Bozeman. Most of these ewe lambs carried a high percentage of fine-wool blood. About 260 of them had been carried through the summer on dry land pasture, while 118 head had been grazed for three months on the National Forest. At the beginning of the feeding trial these lambs averaged 62.5 pounds in weight. Most of them ranged in weight from 50 to 77 pounds although a few weighed less than 50 and some more than 77 pounds.

After having been fed uniformly for about a month, these lambs were divided into three lots so that those from different bands of sheep, and of different sizes were divided equally between the lots. The average weights of each lot was between 62 and 63 pounds. The different lots were kept separately during the entire feeding period of practically four months and were fed different rations.

Hay As a Winter Feed

One lot was fed a ration of hay to determine what amount was required for keeping the lambs growing, thrifty, and in good condition. About one-tenth of the hay fed was mixed alfalfa and timothy which was fed during the first part of the trial. The remaining nine-tenths was alfalfa hay of good quality from the first crop. The amount of hay fed per lamb daily aver-

aged 2.95 pounds during the entire trial. These lambs came through the winter in good condition, there being no loss in this lot. The fleeces were practically all sound and in good condition. The average gain per lamb during the 119-day period was 12 pounds.

Oats As a Substitute for Part of the Hay

The second lot was fed the same kinds of hay as the first lot, but in smaller amounts, part of the hay being replaced by whole oats. The purpose was to feed a ration which would produce the same gain as was produced by the first lot on hay only. The gain by the second lot was slightly larger and the fleeces appeared to be slightly better in condition. The daily ration fed was 1.86 pounds of hay and 0.31 pound or 5 ounces of oats per lamb. As a substitute for part of the hay, five ounces of oats proved slightly better than 1.09 pounds of hay or one pound of oats slightly more than replaced 3.55 pounds of hay in the ration for wintering ewe lambs. These oats averaged in weight 40 pounds per bushel.

Wheat Screenings, Oat Straw and Alfalfa Hay

The most economical ration fed to these ewe lambs was made up of wheat screenings, oat straw and alfalfa hay, as fed to the third lot of ewe lambs. While attempting to find a ration that would be as low in cost as possible and still keep the lambs in practically as good condition as those of the first lot, oat straw and alfalfa hay were fed for a time. It was soon found that very little of the hay could be replaced with oat straw and still get the desired gains and condition. As an additional low priced feed, wheat screenings were added to the ration to raise its feeding value to that of the ration of alfalfa hay fed to the

first lot. The average daily ration fed per lamb was 1.39 pounds of hay, 0.8 pound of oat straw, which was free from grain, and 0.65 pound of wheat screenings. The gains and the condition of the lambs of this lot and of those fed hay only were practically identical. According to these results 1 pound of screenings and 1.23 pounds of oat straw were equal in feeding value to 2.41 pounds of the hay fed in this trial. At the prices given for these feeds the ration of screenings, oat straw and hay was 25 per cent cheaper than the hay ration.

The screenings used in this trial contained 60 per cent of broken and shriveled wheat, $3\frac{3}{4}$ per cent of wild and cultivated oats (mostly wild), and a little over 11 per cent of black weed seed such as fanweed or French weed, lamb's quarter, and mustard.

Sheep Destroy Small Black Weed Seeds

In order to determine the germinating quality of weed seeds after being fed to sheep, two wethers were fed screenings comparable to the above at the rate of two pounds per head daily for 30 days and the droppings were collected during the last 20 days. Samples of these droppings were put into clean soil and kept moist for 60 days. During this time one fanweed seed, one alfalfa seed, one sweet clover seed, and one wheat grain sprouted. The conditions of the test made contamination to that extent possible. Since the wethers cleaned up all of the seeds in the screenings the evidence seems quite conclusive that sheep destroy the weed seeds they eat. Spreading of weed seeds by feeding screenings to sheep seems to result only from spilling them out of bags and troughs and not from scattering them in the dung of sheep.

Apparently special care must be exercised in starting lambs on screenings



Lot I, fed on hay only, was in good condition at the end of the feeding period as indicated by the above picture.



The condition of Lot II, fed alfalfa hay and oats, is shown in the above photograph.

The picture to the left shows the condition of Lot III at the end of the feeding trial. These lambs were fed on wheat screenings, oat straw and alfalfa hay.

if they are as heavy as those used in this trial. One lamb died a few days after this lot was started on screenings apparently from eating too much at the start. These lambs were fed about $2\frac{3}{4}$ ounces per head daily in two feeds for several days or until all of the lambs were eating them well. After this time the amount fed was gradually increased. The two wethers which were fed individually were brought up to a feed of two pounds each daily in very short time with no apparent bad effect. Each received a definite amount and each was unable to get any part intended for the other sheep.

Screenings vary greatly in feeding value, depending particularly on the amount of chaff and dirt which they contain. Those used in this trial were above the average for elevator screenings,

In the following table are given equivalent prices for hay of the kinds used in this test and of oats, oat straw

and screenings. The values apply to the various feeds in the feed racks or troughs.

Value of hay per ton	Equivalent value of oats per 100 lbs.	—Equivalent value of wheat screenings (60% wheat)	
		oat straw per ton	per ton
\$7.50	\$1.33	\$1.50	\$20.00
10.00	1.77	2.00	27.00
12.50	2.22	2.50	34.00
15.00	2.66	3.00	40.00

Since oat straw and wheat screenings were both used to replace hay in one of the rations fed to these lambs, it was necessary to set a value on one of the feeds. A liberal value of one-fifth that of hay was allowed for the oat straw, and the value of wheat screenings was calculated from the prices of hay and oat straw. It is evident that the screenings were worth more for replacing hay than is ever paid for screenings of this character.

These prices are based on the feed in the racks and troughs and not in

the stack or grain bin. The cost of feeding is so variable that no single estimate of the cost in the stack or grain bin can be given. While these prices may not apply to very many conditions, the data in the table are sufficiently complete so that the cost can be calculated on the basis of any other schedule of prices.

At the prices given for these feeds, the cost of a day's feed for a lamb varied from practically $1\frac{1}{2}$ cents down to 1 1-10 cents, the cheapest ration being hay, oat straw and wheat screenings. The cost of the ration of hay and of the ration of hay and oats was practically the same at these prices.

All feed used in the trial were fed in feed racks or troughs. This fact may account in part for the comparatively low requirement of feed for the results obtained, since there was very little waste or refused feed with the exception of the oat straw.

The essential results of this trial are given in the following table:

LOT No.	I	II	III Hay, oat straw, screenings
Ration fed—	Hay	Hay, oats	
Length of feeding period, days	119	119	119
Number of lambs in lot	127	126	123
Average wt. per lamb at beginning, lbs.	62.5	62.2	63.0
Average gain per lamb, lbs.	11.9	12.9	12.0
Average daily ration fed per lamb:			
Mixed alfalfa and timothy hay, lbs.	0.29	0.21	0.23
Alfalfa hay, lbs.	2.66	1.65	1.16
Oat straw offered, lbs.	-----	-----	0.80
Oat straw eaten, lbs.	-----	-----	0.52
Oats fed, lbs.	-----	0.31	-----
Wheat screenings fed, lbs.	-----	-----	0.65
Cost of daily ration per lamb	\$1.47	\$1.43	\$1.10

FEED PRICES: Hay, \$10 per ton; oats, \$1.60 per 100 lbs.; oat straw, \$2 per ton; screenings, \$10 per ton.

Nebraska and Kansas Ration Tests With Lambs

The Nebraska Tests

This experiment covered 84 days, closing on January 9. It is the first of a series to be conducted with the following objects in view: to study the value of adding linseed oil meal and cottonseed meal to the standard Nebraska ration of shelled corn and alfalfa hay; to study the use of varying amounts of these protein supplements in the ration; to determine the value of feeding oats at the beginning of the period; and to compare the relative merits of alfalfa and prairie hay for fattening lambs.

Medium weight Wyoming lambs, most of which were tight wooled and classed as choice feeders, were purchased at the Omaha market in October. During the five days that elapsed from the time of purchase until the experiment opened, these lambs were fed clover hay and water. At the end of this time, they were charged into the experiment at \$13.10 a hundred, and averaged 61 pounds per head. They were divided into nine lots of thirty lambs each, care being exercised to have the lots as uniform in total weight, distribution of weight, condition, outcome and sex as possible.

The following rations were fed:

- Lot 1. Shelled corn and alfalfa hay.
- Lot 2. Shelled corn, oats first five weeks, and alfalfa hay.
- Lot 3. Shelled corn, light feed linseed oil meal, and alfalfa hay.

Lot 4. Shelled corn, medium feed linseed oil meal, and alfalfa hay.

Lot 5. Shelled corn, heavy linseed oil meal, and alfalfa hay.

Lot 6. Shelled corn, heavy feed linseed oil meal, and prairie hay.

Lot 7. Shelled corn, light feed cottonseed meal, and alfalfa hay.

Lot 8. Shelled corn, medium feed cottonseed meal, and alfalfa hay.

Lot 9. Shelled corn, heavy feed cottonseed meal, and alfalfa hay.

All lots received a full feed of shelled corn and alfalfa hay except Lot 2, which received oats as a part of the grain ration for the first thirty-four days, and lot 6, which was fed prairie hay in place of alfalfa hay. The lambs were started on a light feed of corn, about one-sixth of a pound per head daily, and this was gradually increased until the fifth week, at which time the lambs were on full feed. Lots 3, 4, and 5 received linseed oil meal in the following amounts throughout the experiment. Lot 3, .14-pound; lot 4, .20-pound; lot 5, .23-pound; lot 6, which was fed prairie hay instead of alfalfa, received a heavy feed of linseed oil meal, or .23-pound daily. Lots 7, 8 and 9, received cottonseed meal fed in exactly the same amounts as the linseed oil meal fed in lots 3, 4 and 5, respectively. It was intended to have the lambs in lots 5 and 9 consume more than .23-pound of linseed or cottonseed meal, but on account of the warm weather during the experiment, it was difficult to get them to eat more of the meals and

maintain maximum consumption of corn and alfalfa.

The prices used for feeds in this test represent average farm prices over a great part of Nebraska at the time the experiment opened. The cottonseed meal and linseed oil meal were charged to the lambs at the same price, there being very little difference in the price of these two feeds over the state as a rule.

Shelled corn, per bushel	\$0.60
Oats, per bushel40
Linseed oil meal (old process), per ton ..	50.00
Cottonseed meal, per ton	50.00
Alfalfa hay, per ton	15.00
Prairie hay, per ton	12.00

Feed Consumed and Gains

It will be noted from the table that the difference in daily corn consumption was not great. All the lots receiving linseed oil meal consumed slightly less corn than lot 1, where no supplement was fed. On the other hand, the lambs in lots 8 and 9, which were fed medium and heavy amounts of cottonseed meal, consumed a daily average of 1.13-pounds corn and .15-pound oats, in comparison with 1.20-pounds of corn in lot 1. The daily alfalfa hay consumption varied from 1.09-pounds in lots 4 and 9, to 1.20-pounds in lot 1, it being uniformly less in all the lots receiving linseed oil meal and cottonseed meal. It may be seen, however, that lot 6, which received prairie hay, consumed only half as much hay as lot 5, both of these lots receiving the same amounts of shelled corn and linseed oil meal.

The average daily gain per lamb was greater in each of the lots receiving a protein supplement added to corn and alfalfa than in lot 1, where the basal ration was fed. The smallest daily gain was in lot 6, the prairie-hay-fed lambs, it being only .265-pound daily. The oats lot made slightly less gain than lot 1, fed the standard Nebraska ration. The largest average daily gain (.37-pound) was made in lot 8, where a medium amount of cottonseed meal was fed. Almost equaling this was the gain of .331-pound which was made by lot 5, the lot receiving the greatest amount of linseed oil meal.

Cost of Gains

The cost of 100-pounds gain was in no other instance as small as lot 1, which received the standard ration. The most costly gain was made by the prairie hay lot, it being \$1.08 more per hundred pounds than that for lot 1.

The feed requirements for one hundred pounds gain furnish the most significant facts of the experiment. The addition of a supplement reduced in every case the amount of corn and alfalfa hay required for one hundred pounds gain. In the main, the total concentrates consumed in all lots was very near the same as that consumed in lot 1. The average total concentrates required for one hundred pounds gain in all lots was 439.6 pounds. The average roughage consumed for one hundred pounds gain in all lots was 364 pounds.

The real measure of efficiency of a supplement is its replacement value in terms of the standard feeds of the ration.

A study of the three linseed oil meal lots in the above table shows that when more linseed oil meal was added to the ration its replacement value was decreased. This, however, is not true for the three cottonseed meal lots. Here the greatest replacement value occurred in lot 8, fed the medium amount of cottonseed meal. Possibly this was due to a difference in feeding quality of the lambs, or on account of a greater fill at the time final weights were taken. (This latter was borne out by the fact that this lot shrunk more in shipping than any other lot.) Taking all cottonseed meal lots into consideration, the replacement value was not equal to that of linseed oil meal. However, cottonseed meal fed in medium amount replaced slightly more corn and hay than linseed oil meal similarly fed. It can be seen from the above table that the heavy feed of cottonseed meal gives the lowest replacement value, it being quite a bit lower than

that for the heavy feed of linseed oil meal.

Oats in this experiment did not prove to be advantageous, since the lambs in lot 2 consumed less feed and did not make as rapid or as economical gain as the lambs fed the standard ration of corn and alfalfa. The replacement value of oats was low, 54 pounds of oats replacing 19 pounds of corn, and 23 pounds of alfalfa hay. Prairie hay was not as efficient as alfalfa, lambs only consuming half as much prairie as alfalfa hay per day. On the other hand these lambs consumed more corn and oil meal, making the cost of one hundred pounds gain much higher.

Selling Price and Profits

At the Omaha market January 12th, the lambs were appraised at \$14.25, this being the top of the market for the day, the appraisers, however, making no difference in value of the lots. This speaks well for all rations as far as the finish of the lambs was concerned. Profits per head were good considering the rather small margin of \$1.15 per hundred pounds between purchasing and marketing prices. The lambs fed the standard ration of corn and alfalfa made the

**100 POUNDS OF PROTEIN SUPPLEMENT REPLACED THE FOLLOWING
AMOUNTS OF CORN AND ALFALFA.**

Supplements—	Light feed of —supplement—		Medium feed of —Supplement—		Heavy feed of —Supplement—	
	Corn	Alfalfa	Corn	Alfalfa	Corn	Alfalfa
Linseed oil meal	130	150	90	138	98	105
Cottonseed meal	80	132	97	143	46	98

TABLE I. 84-DAY LAMB FEEDING EXPERIMENT, OCTOBER 17, 1922, TO JANUARY 9, 1923

	Lot 1 30 Hd.	Lot 2 30 Hd.	Lot 3 30 Hd.	Lot 4 30 Hd.	Lot 5 30 Hd.	Lot 6 30 Hd.	Lot 7 30 Hd.	Lot 8 30 Hd.	Lot 9 30 Hd.
AVERAGE DAILY RATIONS—									
Pounds per head:									
Shelled corn, lbs.	1.20		O.M.Lt.	O.M. Md.	O.M. Hvy.	O.M. Hvy.	C.S.M. Lt.	C.S.M. Md.	C.S.M. Hvy.
Oats (1st 5 weeks), lbs.		1.13	1.18	1.18	1.18	1.18	1.18	1.21	1.22
Linseed oilmeal, lbs.		.15				.23			
Cottonseed meal, lbs.			.14	.20	.23		.14	.20	.24
Prairie hay, lbs.						.69			
Alfalfa hay, lbs.	1.20	1.12	1.15	1.09	1.14		1.11	1.11	1.09
AV. INITIAL WT per head, lbs.	61.5	61.4	61.5	61.3	62.1	61.8	61.9	61.9	62.5
AV. FINAL WT. per head	86.9	85.4	89.0	88.9	89.9	83.6	88.1	90.3	89.9
AV. GAIN per head	24.28	23.86	27.47	27.64	27.80	21.84	26.12	28.30	27.38
AV. DAILY GAIN per head	.289	.284	.327	.329	.331	.260	.311	.337	.326
FEED REQUIRED per 100 Lbs. gain—									
Shelled corn, lbs.	417	398	362	360	357	455.5	380.5	358	374
Oats		54							
Linseed oilmeal			43.5	60.7	69.3	88.3			
Cottonseed meal							45.7	60.4	72.5
Prairie hay						265			
Alfalfa hay	416	393	351	332	344		355.5	330	335.5
COST OF 100 POUNDS GAIN	\$7.58	\$7.88	\$7.59	\$7.86	\$8.13	\$8.66	\$7.88	\$7.82	\$8.33
FINANCIAL STATEMENT—									
Initial cost per head@13.10 per cwt.	\$8.06	\$8.04	\$8.06	\$8.03	\$8.13	\$8.10	\$8.12	\$8.10	\$8.18
Feed cost per head	1.84	1.88	2.08	2.17	2.26	1.89	2.06	2.21	2.28
Interest on investment at 8%	.20	.20	.20	.20	.21	.20	.20	.21	.21
Cost of marketing	.39	.39	.39	.39	.39	.39	.39	.39	.39
Total cost per head	10.49	10.51	10.73	10.79	10.99	10.58	10.77	10.91	11.06
Value per cwt. at market	14.25	14.25	14.25	14.25	14.25	14.25	14.25	14.25	14.25
Weight per head at market, lbs.	84.64	83.21	85.00	83.67	85.00	78.33	83.33	82.41	85.52
Returns per head	\$12.06	\$11.86	\$12.11	\$11.92	\$12.11	\$11.16	\$11.88	\$11.74	\$12.19
Profit per head	1.57	1.35	1.38	1.12	1.13	.58	1.11	.83	1.13

MARKET VALUE OF FEEDS: Corn at 60c per bushel; oats at 40c per bushel; linseed oilmeal at \$50 per ton; cottonseed meal at \$50 per ton; prairie hay at \$12 per ton; alfalfa hay at \$15 per ton.

most profit per head. Although the linseed oil meal and cottonseed meal lots made greater daily gains than lot 1, they did not equal in profit the corn and alfalfa fed lambs, because of the fact that their gains were made at a greater cost. Lot 6, the prairie hay lot, gave the smallest profit per head, it being only 58 cents. This is easily explained by the fact that these lambs ran up the cost of gains by consuming large amounts of concentrated or high-priced feeds, and a relatively small amount of prairie hay or cheap feed.

Since this is the first year in which this investigation has been conducted, it is advisable that it be repeated and the results carefully checked rather than considering this one year's results as conclusive.

The full records for each of the nine lots is shown in Table I:

Other ration tests have been reported in the Wool Grower as follows: Washington, May, 1923; Wyoming, March, 1922; Washington, Idaho and Nebraska, May, 1922; Kansas and Oregon, November, 1922.

The Kansas Tests

One hundred and forty lambs were fed experimentally by the Animal Husbandry Department of the Kansas Experiment Station during the winter of 1922 and 1923.

The lambs used in the experiment were New Mexico lambs and were an average type of quality. Care was taken to get the lambs in each lot as uniform as possible as to weight and conformation. The lambs were fed in the open and had access to a shed that was open on the south.

Shelled Corn vs. Whole Kafir Corn

These grains were fed along with alfalfa hay, cane silage and cottonseed meal. The results of the test showed that lambs fed shelled corn made an average daily gain of .2 of a pound more per day than the lambs fed whole Kafir. It required 20 pounds more whole Kafir, 16 pounds more alfalfa hay and 18 pounds more silage to make 100 pounds gain in the case of Kafir fed lambs than the corn fed

lambs and cost 47 cents more to make 100 pounds gain.

The corn fed lambs were valued at Kansas City at \$15 per hundredweight, and returned an income of \$1.66 per lamb for labor, while the Kafir fed lambs were valued at \$14.85 per hundredweight, and returned an income of 81 cents per lamb for labor.

Whole vs. Ground Kafir Corn

The other part of the ration used in this test consisted of alfalfa, cane silage and cottonseed meal. The lambs in each lot made exactly the same average daily gain of .34 pounds per day, and it required 2 pounds more ground Kafir, 2 pounds more alfalfa hay and 4 pounds less silage to make 100 pounds gain, and cost 47 cents more to produce 100 pounds gain when the Kafir was ground as compared with whole Kafir.

The lambs fed whole Kafir were valued at \$14.85 per hundredweight at Kansas City, and returned 81 cents per lamb for labor, while the ground Kafir fed lambs were valued at \$14.35 per hundredweight and returned \$1.08 per lamb for labor.

Whole Kafir Corn vs. Kafir Corn Heads

These lots also received alfalfa, cane silage, and cottonseed meal. The amount of Kafir heads fed was based on the ratio of grain in head when threshed, or two parts grain to one part head.

A comparison of these tests shows that lambs fed Kafir heads made .2 of a pound greater average daily gain than the lambs fed threshed Kafir, and it required 22 pounds more of the Kafir heads to make 100 pounds gain than it did of the threshed Kafir and it required 16 pounds more alfalfa hay, 35 pounds more silage to make 100 pounds gain in the threshed Kafir lot than in the Kafir heads lot. This is due to the lambs consuming a portion of the stalk of the kafir heads. The whole Kafir lot made 100 pounds of gain 5 cents cheaper than did the Kafir heads lot.

The threshed Kafir fed lambs were valued at \$14.85 per hundredweight at Kansas City and returned 81 cents

STOCKMEN'S EVENTS

Pacific International Livestock Exposition, Portland, Ore., November 3-10.

California Wool Growers' Convention, San Francisco, Calif., November 15 and 16.

American National Livestock Association's Convention, Omaha, Nebraska, January 15, 16 and 17.

National Wool Growers Association's Convention, Salt Lake City, Utah, January 22, 23 and 24.

per lamb for labor, while the Kafir heads lot was valued at \$14.65 per hundredweight, and returned \$1.56

Alfalfa vs. Sweet Clover

These hays were used along with cane silage, shelled corn and cottonseed meal. The lambs in this test made exactly the same average daily gain of .36 pound. However, the lambs fed sweet clover hay required 4 pounds more shelled corn, 113 pounds more sweet clover hay, 120 pounds more silage to make 100 pounds gain than the lambs fed alfalfa hay and it cost \$1.08 more to produce 100 pounds gain in the case of lambs fed sweet clover hay than those fed alfalfa hay.

The alfalfa fed lambs were valued at Kansas City at \$15 per hundredweight, and returned \$1.66 per lamb for labor, while the sweet clover fed lambs were valued at \$14.65 per hundredweight, and returned 81 cents per lamb for labor.

Sweet Clover Hay With and Without Cottonseed Meal

Both lots also received some silage.

The lambs fed cottonseed meal made .2 of a pound greater average daily gain than the lambs not receiving it and it required 22 pounds more corn, 42 pounds more hay and 20 pounds less silage to make 100 pounds gain, where no cottonseed meal was fed.

The lambs in these lots were both valued the same, \$14.65 per hundredweight. The lambs fed cottonseed meal returned 81 cents per lamb for labor, while the lambs fed no cottonseed returned \$1.37 per lamb for labor.

LETTER FROM A SHEPHERD TO HIS PAL

On the Summer Range,
September, 1923.

Dear Ern:

Don't them Eastern guys get your reverent goat? Here's Professor Erwin Daring Graham, as hasn't been out here more'n six weeks, starting to write a library about the sheep business. Why, he ain't seen nothing of sheep yet! All the time he's been here the sun shone bright, we had three purty square meals pr. day of grouse, trout or fat lamb. We just laid around in the shade of the soft murmuring pines and fed right out of the Dutch oven, regardless of our girlish outlines. Why, Erwin D. can just about tell the difference between a three weeks old bedground and a campus—that's Greek for Greek Here-we-cam-pus—and now he's going to tell the pop-eyed universe.

Yes, sir, Ern, he's got gall. I'll copy you some of the dope he wrote right on the start and throwed away. He lets on that a new borned lamb is peddling this—just like that was possible—honest, he ain't got a lick of sense. I don't see how he's going to find anybody to brace himself up to read that kind of memoranda, but here it is, you don't want to pay no attention to the spelling which I don't think is right because he didn't have no dictionary and I ain't got none now but you can get what he means all-right. He pretends that it's night, along about the middle of May, somewhere in the breaks of the Rockies.

"My very first impression was that somewhere, and somehow, consciousness was battling with cold, darkness and unlimited space. Then there was a brief moment when darkness yielded to light and I became aware of the fact that I had the power of vision. I could see. On the instant all my senses flashed themselves into serviceable array. Cold and darkness were measured, matched against the living me, and conquered. There remained the sensation of space, immeasurable

space, unbearably vast and hopelessly everywhere, of which I was the very center. A terrible loneliness crept over me; consciousness became acute and personal, and with that came the first emotion to which I was subjected—an almost overwhelming fear.

"I was afraid. And as if in answer to an unvoiced call that my fear sent back past the fast closing veils of my shadowy unknown, whence there came to me an aid, a guide, assuming immediate control of my faculties, namely, instinct. I opened my mouth and found that I had a voice. At once, there was an answer, and I felt myself warmly nozzled, lovingly, reassuringly, and I realized that I had located a friend, a pal. Fear and loneliness left me—I had found my mother.

"By and by, ambition seized me and I stood up. It was a wobbly stand, I admit, for as yet I did not know into what carneous shape the whim of Fate had flung my spirit, and was not sure as to whether I had four legs or six. Soon, however, I established my equilibrium on a quadruple basis and made an earnest effort to walk. At first I only staggered and even repeatedly fell down. But after a few trials I learned to operate my legs in better fashion and found them quite serviceable. So far, all was well. I was beginning to notice, though, a strange feeling that I could not account for. I felt myself in great need. Something was wrong, and in my quandary I bleated somewhat uncertainly. My mother promptly answered. She understood, and knew that I was hungry. With sundry nudgings and much loving nozzling she managed to nurse me and to syphon a liberal quantity of good rich milk down into my interior. I began to have confidence in my sphere of things; it seemed that I was a welcome guest whose needs had been anticipated and carefully provided for.

"Now there came a change in my surroundings. So far, all illumination had found its source in an elaborate series of golden pendants that hung suspended overhead in a region of infinite deep blue. These lights, so quiet and soft in their lustrous golden splen-

dor, presently faded away before a greater light that rose, dominating and flooding the landscape with its matchless brilliance. Under these conditions I could see much better and upon looking around I discovered that I was only one of a great many lambs that had just newly arrived in this place. Like myself, they stood by their mothers, or their mothers stood by them, all seeming to have formed the same sort of partnership. But, upon looking them all over I certainly had occasion to feel glad and I confess that where I was not already swelled with milk I swelled with a pardonable pride; because my own mother was by far the finest ewe in the whole herd."

After copying you all that stuff, Ern, I feel like asking you are you still there like on the phone, but I wanted to show you how a fellow like Prof. here can make a donkey of himself when it comes to the sheep business. Why, a newborned lamb couldn't never dope out a mess like that nohow, and I'd like to see what Erwin Daring Graham would write if he'd have to go out on a stormy night when it was raining pitchforks and sawlogs for handles and you couldn't see nary a soft golden star no place—I'd like to know what he'd comment if he had to go out on a night like that and drag the newly arrived into a shed and personally nozzle and love and syphon 'em full of pride and milk. Yes, I'd just like to see if he wouldn't sing a different tune. No, sir, Ern, he's a darned sight better astronomer than a shepherd. Besides that, it ain't right. There's a lot of guys when they read such junk as would get the idea that a shepherd gets paid for herding the stars instead of sheep and that might lead some of 'em astray into a career as winds up at the end of a fascinating trail of wore out shoes.

But I got to close, Ern, 'cause it's getting dark and I can't see by the light of them golden pendants that Erwin D. is so crazy about, so no more this time from

Yours in darkness, cold, space and
battling pride,

Richard A. Wormwood.

AROUND THE RANGE

(Continued from page 27)

NEVADA

The summer range has been very good as there was plenty of rain, and from all appearances there is going to be a good supply of feed on the fall range. All of the wool in this locality was sold at prices ranging from 41 to 46 cents a pound. All of the lambs have also been contracted. Ten cents a pound has been paid recently for mixed lambs, ewes and wethers. Not many ewe lambs will be held this year. Sound-mouthed ewes are priced at \$11 per head, while aged ewes are moving at \$3.50 per head.

There seem to be more coyotes than last year. We believe this is due to the fact that we have no bounty here.

Burton H. Robson.

Aurum, Nev.

COLORADO**Glenwood Springs**

Most of our lambs go to market fat and are now selling there at \$12.50 to \$13.35. However, one bunch of feeders has been sold here at ten cents. No ewes have been sold.

Present indications are that the fall feed will only be fair. The farmers are asking \$10 to \$15 per ton for their hay. None of it is being bought, however, as the stockmen will ship their live stock to market unless feed can be bought at lower prices.

J. S. Hunn.

* * *

Stoner

The summer range has been very good except that there has been too much rain to have the lambs put on good hard fat. There will be about the same number of lambs shipped to Denver and Kansas City (our markets) as last year. I have not heard of any ewes selling here.

We have no bounty here on coyotes and as a result they are very bad, worse I think than a year ago.

I got 44 cents for my wool, but did not sell until after the prices were lowered. I had a good clip of long fine wool. I am using the best registered Rambouillet rams I can afford

to buy. I bought three at the Salt Lake sale in 1922 at \$80 and \$82.50. I think nowadays the best way a man can invest his money, if he intends to stay in the sheep business, is in good rams. My bunch is showing what they will do. I keep all of my ewe lambs.

We winter in Montezuma County and summer in Dolores County, and have one of the worst driveways anyone ever saw prescribed by the Forest Service. The cattle can go anywhere they like on the road or any other place, but the sheep have to use this driveway made by the Forest Service with the snow on it all the way from three to ten feet deep on the 19th of June—and the pack outfit has to go a different way.

J. B. Millard.

* * *

Cheyenne Wells

About two-thirds of the lamb crop has been marketed or contracted for and a slight increase over last year's number is noted. Eleven cents has been paid for feeder lambs, delivered in the Arkansas Valley, fifty miles from here. Most of the ewe lambs are being held for building up the flocks. I have not heard of any sales of yearling ewes, but aged ewes are selling at four cents per pound.

Wherever it is possible, feeding lambs and ewes should be trailed and delivered to the feeder, to save shipping expense and avoid the contracting of diseases, such as contagious pneumonia.

Prospects for good fall feed are excellent.

Wm. Lange.

* * *

Como

From all indications the feed on the fall ranges will be unusually good, as we have had more rain than ever before.

The number of lambs to be shipped this season is about the same as a year ago. About 90 per cent of them has been contracted, but none have been marketed yet. Recently feeder lambs have been sold at \$10.50 to \$10.85 per hundred pounds weighed at the ranch.

Edward E. Mills.

WOOL IMPORTERS INDICTED FOR FRAUD

An indictment has just been returned by a Federal grand jury against Robert W. A. Wood and Thomas A. Wood of Philadelphia.

This action follows an investigation relating to the importation of three shipments of wool during March and April from South America to New York, on which it is alleged the defendants attempted to defraud the Government out of duties amounting to over \$150,000.

The Daily News Record says:

"The indictment sets forth that Cordova carpet wool was taken to the barraca of Alberto Pulg & Cia, Montevideo, where it is alleged the said Montevideo clothing wool should be so packed with the said carpet wool that the fleeces or parts of fleeces of the aforementioned Montevideo clothing wool should be placed inside the fleeces or parts of fleeces of the said Cordova carpet wool and thereafter baled so that the presence in the bales of the Montevideo clothing wool, upon which at all times hereinafter mentioned there would be duty due to the United States, should be concealed, and it should appear that the said bales contained only duty free carpet wools.

"The indictment then charges that the packing of the wool in bales as above described as in accordance with instructions received by Thomas A. Wood from Robert W. A. Wood and these alleged instructions also directed the former to ship the bales to the latter on the steamships Southern Cross, Bonheur and Boswell, which arrived at New York on March 6 and 8 and April 15, 1922 * * *

"The indictment then charges that it was a part of the conspiracy for Thomas A. Wood to submit false and fraudulent consular invoices, declaring that the bales of wool so imported contained only carpet wool purchased for about 15 cents a pound, whereas the indictment charges that the bales contained a large amount of high grade wool which was subject to duty of approximately 30 per cent."

Our Native Broad-Leaved Forage Plants

By A. W. SAMPSON, Department of Range Management, University of California

(This is the fourth and last article by Dr. Sampson on the most important non-grass plants upon sheep ranges.)

BROWSE PLANTS AS FOOD FOR SHEEP

Sheep are natural browse animals. They feed greedily upon the leafage of an enormous number of different kinds of woody plants and do exceedingly well when cropping upon them. Many wool growers select, in preference to a pure grass or even a combination of grasses and weeds, a range which supports a goodly mixture of palatable browse with the herbs. "For my sheep I'd choose a good browse range every time. On brushy range you get consistent gains, a well-balanced, solid fat, and a good lot of feed every year. The grass and weed feed is always short in dry years but the leafage of the buckbrushes, roses, mahoganies, and willows comes along just about the same." These were essentially the words of a grower who for twenty years had grazed his bands on summer and winter range near Cedar City, Utah. Few persons who have ridden the ranges in that section have returned with much of a shirt on, for browse is something of which "there is little else but!" It must be admitted, however, that very fine, blocky lambs are marketed every year from these parts.

To insist that one type of range is superior to another leads one into much the same difficulties as to say that the Rambouillet "is the only sheep worth his salt." Any palatable range type probably possesses some merit and the browse cover naturally comes in for its share. There are drawbacks, such as snagging, getting sheep trapped, and many other such things, of course, in handling sheep on browse range, but brush feed nevertheless is valuable, especially for sheep and goats.

Less is known at present as to how properly to stock browse lands than any other major forage type. Some

claim that if all of the browse feed is grazed the understory of grasses and weeds will be killed and that erosion thereafter is liable to cause much damage. Others insist that where the browse vegetation is abundant the range should be stocked on the basis of the brush forage and permit the undergrowth to be killed out. It is no doubt best to maintain a stand of all



Fig. 1. Bluebrush (*Ceanothus*), a browse plant equal in forage value to that of the choicest of herbaceous vegetation.

types of forage plants if this can be done without a serious waste of feed.

The Buckbrushes

Sheep growers and cattlemen have a vivid example every time they ride the range as to the difficulty of handling stock on buckbrush lands, for many kinds have sharp, thorny branches. It is almost unbelievable that many a cow-

man who works regularly in buckbrush country wears to rags in from eight to ten months the best chaps obtainable.

The buckbrushes, also called buckthorne or merely "chaparral," are members of the buckthorn family, which embraces not fewer than 600 different kinds of plants. Not all of the buckbrushes are greatly relished by stock, but some are of unusual forage value. Because of the aggressiveness and dense stands of some, on the other hand, the range has little or no value, for the plants cause a mere "chaparral waste." Over large stretches in the Southwest, in parts of California, and in sections of the Northwest some buckbrushes hold in check the growth of highly desirable pasture vegetation. Burning a tangle of buckbrush areas has been tried in a few localities but such a practice has seldom given good results—in fact in some instances burning seems to have injured the range seriously.

There are at least fifty different kinds of buckbrushes, and they are best represented in the far Western states. They are rather low growing, spiny, or thorny shrubs, with white, blue, or sometimes yellow flowers, and berry-like fruit. There is probably not a better browse plant in the West than Nevada buckbrush, sometimes called "bluebrush" (Fig. 1). It occurs most commonly in the mountains of central California from whence it runs north to the Columbia River in Oregon. Throughout the season the leafage is sought eagerly by sheep, cattle and goats. Sheep are especially fond of the flowers. On many ranges, largely because of its high palatability, Nevada buckbrush is declining sharply in abundance. Few sheepmen in California would trade range where "bluebrush" constitutes the main feed for that of other forage type.

The Wild Roses

The rose family embraces no fewer than 1,000 different kinds of plants,

Fig. the sp stock.

but practically all of those of high forage value are shrubs or small trees.

At first thought it would seem that plants like wild roses, with their rather spiny branches, would be so well protected that the foliage would not be consumed by live stock (Fig. 2). This, however, is not the case, for the leafage is devoured closely by sheep and goats and to a somewhat lesser extent by cattle. While the wild roses seldom occur in dense stand, they contribute a considerable amount of first-class browse feed. Sheep and goats consume with relish the leafage of practically all the different kinds of wild roses. Deer, elk, and certain other game animals are also quite fond of the leafage and of the fruit in the fall, which is densely packed with seed.

The Mountain Mahoganies

There are about ten different kinds of mountain mahoganies, native to western North America and Mexico. They are shrubs three to twelve feet high, with stout stems and hard, brit-

tle wood capable of taking a high polish. One of the outstanding features of the mahoganies is the slender, variously bent, feathery tail of the seed, in some kinds being not less than four inches long. Several of the mountain mahoganies are highly valuable for the forage which they produce, the leafage being browsed with unusual closeness by sheep, cattle, and goats. A few kinds, however, like curl-leaved mahogany, are of no value as forage for live stock, yet in winter some of these are browsed rather closely by game animals, notably deer. Birch-leaved mahogany, because of its wide range, its low, dense growth, and the unusual palatability of the leafage, is among the most important of the group (Fig. 3). It grows from two to ten feet high, has wedge-shaped conspicuously toothed leaves, and seeds with a tail attachment about four inches long. The range throughout the Western states is unusually wide and in elevation the plant grows as high as 8,000 feet. It is commonly associated with serviceberry and scrub oaks.

As a stock-food birch-leaved mahogany is second to none for cattle, sheep, and goats. Moreover, the leafage is among the earliest of the palatable browse plants to unfold in the spring, and hence it furnishes feed before most of its associates are ready for cropping. Also the leafage is unusually resistant to frosts, so that it remains highly palatable until late in the autumn. Were it not for the fact that the older plants are sufficiently tall so that all of the leafage cannot be grazed, the all-important "birch-leaf" would probably long since have been eliminated.

Bitterbrush

Bitterbrush, also known as antelope brush, is confined to the states of the far West. It is a much branched shrub three to eight feet high, with a profusion of alternate leaves, deeply three-cleft, resembling that of black sage. The flowers are conspicuous, yellow in color, and the seeds, which are densely hairy, are long-tailed. The plant is widely distributed and occurs

in considerable abundance on many a valuable sheep range. Sheep and goats browse upon bitterbrush with unusual eagerness. The leafage appears early in the spring and a large amount of choice feed is produced. It is said to furnish a "strong" food, and to put on a solid fat which is not readily lost when the animals are shipped long distances or are subjected to inclement weather. Another asset is that bitterbrush withstands heavy grazing.

The Willows and Poplars

The willow family comprises only two distinct groups of plants, the poplars and the willows. In many localities willows furnish a large amount of fairly good feed. The leafage of nearly all species is consumed at least with moderate relish by sheep and goats. Cattle and horses also devour the foliage to a limited extent. Like many browse plants, the willows are well adapted to close pasturing, for there are usually a few branches of such length that all of the forage

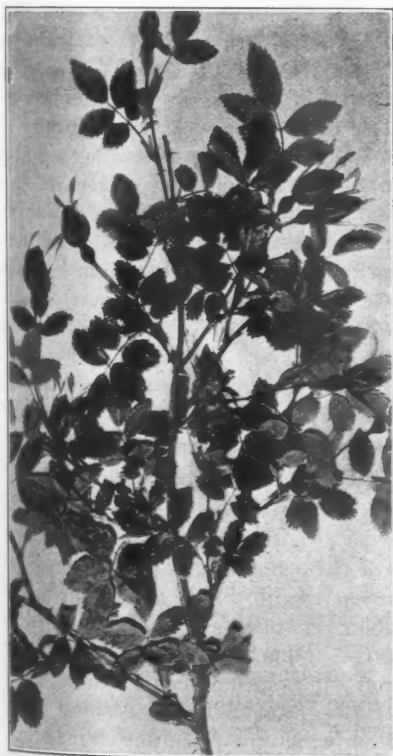


Fig. 2. Wild Rose (Rosa). In spite of the spines the leafage is relished by live stock.



Fig. 3. Birch-leaved mahogany (Cercocarpus), probably the most valuable browse plant of the rose family.



Fig. 4. Thin-leaved huckleberry (*Vaccinium*). Huckleberry range is utilized more economically by sheep than by cattle.

cannot be reached by stock, thus giving the plants adequate protection. Moreover, the means of reproduction of willows, accomplished both by seed and by sprouts, tends to maintain a good stand in spite of heavy browsing. Some willows make their appearance shortly after a heavy burn, and for this reason one in particular is known as "fire willow." It furnishes a considerable amount of good forage.

Stockmen are sometimes inclined to under-rate the extent to which aspen reproduction is browsed because sheep and a young aspen stand do not always mix well. Sheepmen must admit, however, that wherever a range is overgrazed the band clips down an alarming amount of the young aspen sprouts. The writer has repeatedly examined cut-over aspen lands where the sprouts have been almost entirely devoured. Under such conditions the range is clearly overgrazed. Where a good balance of forage is found sheep inflict little permanent damage to the aspen sprouts.

The Huckleberries

The huckleberries belong to the heath family, of which the heathers and "kinnikinnick" are also members. It will be recalled that the leaves of



Fig. 5. Black sage (*Artemisia*).

"kinnikinnick" were used extensively by the Indians as smoking tobacco. The huckleberries, also called "blueberries" and "cranberries," number about 150 different kinds. They are low grazing shrubs, with alternate rather leathery leaves, and pink, white, or red flowers. Generally, the huckleberries are browsed with relish by sheep and goats and to a limited extent by cattle. In some localities the more palatable kinds predominate over vast areas where they afford much good sheep and goat feed. The best use of huckleberry range is procured by the grazing of sheep. As a rule the stand is sufficiently open to permit of a fair mixture of grasses and broad-leaved plants, the presence of which tends to satisfy the food requirements of the band.

Thin-leaved huckleberry is one of the choicest browse plants of the



Fig. 6. Spiny saltbush (*Atriplex*), one of the best browse plants that occurs on alkali lands.

group. It is a much branched, leafy shrub from one to four feet high. The berries when mature are purple black. They are slightly acid and are delicious when fully ripe (Fig. 4). Friend "Bruin" affords a good example to prove the palatability of the berries. The plant grows characteristically in the woodland type of the foothills where it occupies large areas. The leafage is eaten rather closely by sheep and goats from early spring until late in the autumn. Cattle devour some of the foliage but they are not content when feeding upon a dense cover of huckleberry.

Red-fruited huckleberry, a common Western mountain form, is practically worthless as a browse plant.

The Sagebrushes

The sagebrushes, because of their wide distribution and density of stand, are of considerable importance as sheep forage. Few are highly palatable yet they are relied upon to a great extent for late autumn, winter, and early-spring feed. To the sagebrush group belongs Absinth sage, from which the Absinth extract is procured. Also Alexandria wormwood, so well known because of its medical value, is a true sage.

There are not fewer than 225 different kinds of sagebrushes, some 25 of which occur on Western grazing grounds. They are recognized by their rather bitter aroma, their alternate, often deeply-toothed leaves, and heads of small disc-like flowers. The most important kinds on the range are black sage, white sage, Canada sage, silver sage, and Wright's sage. Of these black sage is best known to Western stockmen (Fig. 5). This plant is relied upon as winter feed for cattle, sheep, and goats much more than is generally realized. True, in some localities it is a mere so-called "filler" rather than a plant of first forage value, but often it furnishes the main forage. The other kinds of sages mentioned, while not as abundant as black sage, in forage value are similar to it.

Saltbushes

There are about 130 different kinds of saltbushes, not fewer than thirty of which occur in the Western states. They are annual or perennial shrubs with more or less mealy, silvery leaves and stems. They grow most abundantly in dry localities at low elevation in alkaline soils. Most of our saltbushes possess some forage value and a few kinds furnish a large amount of excellent feed. On the sheep ranges of Australia these plants produce an enormous amount of first-class feed. Some of the most valuable of these have been seeded on sheep ranges in various parts of the West, but except in a few isolated patches the introductions have not been successful.

Spiny saltbush is one of the most valuable kinds in the West. It is a much-branched gray shrub one to three feet in height, with numerous thick leaves and spiny branches (Fig. 6). Like many other saltbushes this species is grazed closely by all classes of stock. The seed and leafage are quite fattening and even the naked twigs are often consumed by sheep. Most plants when grazed so closely are soon killed out. One reason for the good stands of saltbush is that the ranges, being of low elevation, are seldom grazed

until after the seed crop has ripened, thus making possible abundant reproduction. One investigator remarks: "The saltbush pastures actually improve, for the plants become more matted as the result of the cropping."

A plant known as "winter fat" because of its low stature, its occupying alkali lands, and its high palatability, is sometimes confused with certain saltbushes. Every possible effort should be made to reseed the native pastures to the better saltbushes and to winter fat.

The Serviceberries

There are about twenty-five species of serviceberries, a considerable number of which occur on foothill ranges in the West. They are shrubs or trees with conspicuous white flowers and berry-like fruit which is rather edible. Several different kinds are browsed with relish. Unfortunately, however, the serviceberries seldom occur in very dense stands. Western serviceberry is one of the most valuable. It is not unusual to see the leafage completely devoured to the height to which the animals can reach. The bark is not eaten except where the lands are distinctly overstocked.

The Oaks

Among the browse plants the oaks, in spite of their not being of very high palatability, contribute an enormous amount of feed. The oak mast furnishes food for hogs, as well as for other classes of live stock. A large acorn mast, however, because of its being very rich in oils and fats, is sometimes the cause of losses in lambs and kids. It is a matter of too much "dissert."

In some parts of the West oak forage has the reputation of being poisonous to cattle and sheep. Experiments have shown that animals living on little feed other than that of oak leaves become badly constipated and sometimes die. One investigator concludes that the reason for such losses is the fact that the leaves contain a large amount of fibre, which is largely indigestible, and tannic acid which has a binding effect. Where the oak type

is grazed to full capacity each year the herbaceous vegetation is usually killed out, and the grazing capacity of the pasture is decreased just that much.

CO-OPERATIVE SYSTEM OF PREDATORY ANIMAL CONTROL IN EFFECT IN OREGON

Oregon counties are co-operating heartily with the Biological Survey under the terms of legislation enacted by the 1923 session of the legislature. According to the enactment in question, \$440,000 was provided for predatory animal control under the salaried hunter system. This was to be apportioned among the counties and expended only when a county had made an appropriation equal to the apportionment. Once this was done, the funds could be used for salary of the hunter, expenses, and necessary supplies.

While these state funds are under the control of the State Livestock Sanitary Board, of which Dr. W. H. Lytle of Salem, state veterinarian, is the executive officer, they are being expended in co-operation with the Biological Survey and Stanley Jewett, for several years inspector in charge, is charged with the direction of the hunter, expenses, and necessary supervision. Representatives of Mr. Jewett's office have canvassed the county courts recently and the following appropriations have been made:

Baker, \$1,000; Crook, \$620; Gilliam, \$1,000; Klamath, \$810; Lake, \$2,000; Malheur, \$1,000; Morrow, \$1,500; Umatilla, \$334; Wallowa, \$1,000; Wasco, \$1,500; Wheeler, \$1,000; Harney, \$1,000; Grant, \$1,000.

Indications are that further appropriations will be made in Umatilla County while favorable action is expected in Deschutes County.

This favorable co-operation has made it possible for Mr. Jewett to have twenty-two men on his staff during July and a larger force will be organized by September.

F. L. Ballard.

Sheep Affairs in Australia and New Zealand

By A. C. Mills

Melbourne, Australia, July 16, 1923.

The law of averages appears to be working overtime in a laudable endeavor to overtake the shortage in the rainfall of Australia last summer and autumn. The weather since the beginning of May, when the break started, has been extraordinarily wet over the main pastoral and agricultural districts of the south. Hardly a week has passed without a soaking fall, and generally the storms have occurred at intervals of every few days. While the precipitation over the central and north country has not been so persistent, the bulk has now received sufficient moisture for the time being, although there are still one or two patches that remain on the dry side.

Fortunately the season has not been unduly cold or rough, so the ewes and lambs have not had such a bad time as might have been expected with so much rain about. True, the losses have probably been heavier than normal, but that can be accounted for primarily by the mothers' getting into low condition during the dry spell prior to the break. Anyhow, there should be no shortage of grass and herbage in the spring, and those flockmasters who are building on a spring lambing are reasonably certain of good percentages.

The event of the month has been the Sydney sheep show and sales, held the end of June. The show, in point of numbers of entries and attendance of the public, was not a great success. Still some very excellent sheep were on exhibition. For instance, the supreme champion Merino ram, sent in by Charles Mills (Uardry) Ltd., was a particularly fine specimen of the breed, many competent judges saying the finest seen in the grounds for many years. The grand champion Merino ewe, exhibited by the Willandra Pastoral Company, was also a very attractive sheep, as were the reserve champion ram, bred by the last mentioned firm, and the reserve ewe, forwarded by Henry Collins & Co. from South Australia. No doubt the

late drought was the main cause for the falling off in entries. Of the long-wool breeds, Romneys and Corriedales were best represented, the Corriedale section in particular being well supported. Corriedales are more than holding their own throughout Australia, as they are in New Zealand, and would seem to have a great future as a breed.

The sales were not marked by any sensational bidding, but a good level of prices was maintained for the best Merino offerings. The top figure paid at auction was \$3,930, given for No. 537, bred by F. B. S. Falkiner, Haddon Rig. This was closely followed by \$3,770 paid for F76, sold by F. S. Falkiner & Sons Ltd., Boonoke. The same breeders sold another special stud ram for \$3,150. The Austin Wanganella Co. sold two at \$3,400. Longwools sold disappointingly, \$215 for an imported Romney being the top. South African buyers were conspicuous by their absence.

Apart from an auction in Brisbane at the beginning of July no wool sales of importance have been held since last writing. The offerings in Brisbane comprised some 26,000 bales, the bulk of which showed the effects of the season, being thin, wasty, and poorly grown. Generally speaking, prices were about 5 per cent lower than in May, but a hardening tendency was noticeable towards the close.

From returns prepared by the National Council of Wool Selling Brokers it appears that 1,966,923 bales of wool were sold in Australia during the year ended June 30th, as compared with 2,202,889 for the previous twelve months. This indicates a decrease of 235,966 bales. The figures, however, are rather misleading, as the sales for the first half of the 1921-22 season include 182,057 bales which had been carried forward from 1920-21. When these are deducted it is seen that the decrease for last year, as compared with 1921-22, was only 53,909 bales. I would impress on readers that these

returns only apply to wool sold in Australia, and not production.

While on annual returns I will give a few figures relative to frozen meat exports from the Commonwealth. The following table sets out the total shipments to all oversea ports for the last two seasons:

	1921-22	1922-23
Mutton carcasses ..	901,497	1,932,802
Lamb carcasses	1,343,569	2,757,026
Beef quarters	757,077	971,667

It will be observed that there was a considerable increase with both mutton and lamb. This may be attributed in part to the good prices ruling in Great Britain during the English winter months, but the most important factor was the dry season experienced in this country forcing stock on the markets. It was indeed fortunate that the export trade, thanks to the high values ruling overseas, was in a position to absorb the surplus offerings at profitable rates to growers. Although the yardings in the summer were exceptionally heavy, values never once slumped.

In connection with the above table it is interesting to note that 96.08 per cent of the mutton, 98.5 per cent of the lamb, and 71.84 per cent of the total beef output were consigned to Great Britain during the 1922-23 season. The percentages for 1921-22 were 96.6 with mutton, 97.8 with lamb and 88.4 with beef, which, in the case of the two former, shows a close relation. No frozen meat was shipped from Australia direct to the United States last year.

New Zealand now seems to be having a more ordinary spell of weather, after its exceptionally wet summer and autumn. Heavy snowstorms are reported in the far south, and it was feared when the last advice left that moderately heavy losses of sheep might result. Most of the packing houses have finished their killing season, but a few will keep running until the end of the current month. These are buying the best lambs on the basis of 19½ cents to 21 cents per pound, and crossbred wethers at from 12 cents to 14 cents per pound dressed, according to district.

The Wool Sack

FIGURES ON WOOL SUPPLIES AND CONSUMPTION

The Government wool report of stocks held in the United States on June 30th gives no indication of danger from over-supply. Reports from the same source also indicate that consumption is being maintained at a very rapid rate. The official statistics on the wool situation contain nothing of a discouraging nature. As suggested by our Boston correspondent in this department, something has gone wrong with efforts made to manipulate the summer wool market in a way to prevent what was a prospective rise. With the continuation of the present rate of consumption, supported by the present stocks and such imported supplies as may pay the regular duty, it seems entirely reasonable not only to expect no further decline in wool values, but that an improvement is not unlikely.

The official report of stocks held on June 30th was made public on August 16th. It summarized the reports of 1,419 dealers and 620 manufacturers. The figures given as for dealers include wools held in growers' pools in different parts of the country, but are deficient on account of the refusal of nine dealers to report. Twelve manufacturers, including the American Woolen Company, also refused to make a statement as to amounts consumed. The figures given are for the concerns reporting and compare with the March 31st figures for the same firms.

The stocks are shown to be somewhat larger than at the time of taking the last report on March 31st. Since that date most of the domestic clips have entered into the reports of stocks. Some wools have been exported and importations of certain grades have been continuous. The situation is as follows:

Total wool (grease equivalent) reported on hand June 30: 531,698,479.

Total wool (grease equivalent) reported for March 31: 501,341,015.

Wool held by dealers June 30th: 268,585,534.

Wool held by dealers March 31: 213,141,155.

Wool held by manufacturers June 30th: 263,112,945.

Wool held by manufacturers March 31st: 288,199,860.

Carpet wool, according to the last report, amounted to 90 million pounds as compared to a slightly larger amount of that grade held on March 31st.

July Wool Consumption

Manufacturers reporting amounts of wool consumed by them in July show about a twelve per cent decline from the amount consumed in June of this year. July is seldom a particularly active month and the figures just reported are about two per cent less than for July of last year. The total for this year to date amounts to 399,212,833 pounds as compared to 361,053,469 pounds during the same seven months of last year.

Boston Wool Market

By Henry A. Kidder

It has become quite the fashion in certain local wool circles to talk the market down, regardless of how favorable the outlook may be for the future. It cannot not be denied that business has been very dull during the past month. There has been wool selling, to be sure, and at times in considerable volume. Yet this has been mainly either "distress" lots, or wool which for one reason or another has been thrown on the bargain counter. That this has not been due altogether to weakness on the part of holders is shown by the fact that at times the largest sellers have been from among the strongest houses in the trade. Presumably they were trying to start something. Success to date in this effort has been negligible.

The consensus of opinion is that the manufacturers are simply not ready to buy. As one large manufacturer said to a dealer, who was trying to interest him: "What is the use to show me this wool? I don't want to buy. You can get more for wool later, when the market really opens." Others are not so frank, but they are pursuing the same course in holding off from buying. Most manufacturers seem determined to wait until they get the desired goods orders actually in hand, before they cover their probable needs. The light-weight men's wear season to date has been disappointing, and manufacturers and wool men are all waiting for preliminary business to "soak in" to the goods trade, hoping that when the

garment manufacturers have had an opportunity to test the pulse of the distributors and retail buyers, a radical change in the appearance of the market may be expected.

Not so the womens' wear trade. Initial orders in the section are said to have been heavy; satisfactory in fact, and this ought to go far towards making up for the lean business on the other side of the market. Coupled with the continued activity in heavy-weights, some mills are still a long way from filling the orders placed at the opening of the season and their plants are still busy with such orders. Recently, it has been reported that some of the mills have been getting duplicate heavy-weight orders, and that and the excellent demand for womens' wear goods promises to go far towards bridging over the belated market for men's wear in the light-weight lines.

Altogether the situation seems to be that the wool market, if not now, is soon to see a renewal of active buying on the part of manufacturers. No one expects a "boom." Sentiment does not favor anything of the kind. Nor is it desired or expected that there will be a sudden or radical change in wool values. What is expected, according to the opinions expressed by various leaders in the Boston wool trade, is that the market will gradually develop in a sound and healthy way, with manufacturers buying as the needs dictate, but not buying in a speculative

way to cover theoretical or possible requirements at some indefinite time in the more or less remote future.

When such a time develops, it would be natural to look for a slow but steady improvement in wool values. Here again the experts look for gradual rather than sudden changes. There is still too much foreign wool here to give entire freedom to either dealers or speculators. It is sometimes urged that the overstock undoubtedly existing in this market today is largely in wools that do not come into direct competition with the better domestic sorts, but the way that they have been offered lately has given manufacturers and mill buyers the impression that the Boston market is "sicker" than it really is. Many wool men can not seem to get away for the fact that prices are much above last year's quotations at this season for about everything in the way of domestic sorts, except Ohio and similar fine unwashed Delaine. They continue afraid of the price situation in spite of the fact that Boston is still below the parity of London and all Colonial markets, as well as South America. Naturally under such conditions there is great interest felt, sentimentally, at least, in the approaching opening of the new series of the London wool sales, scheduled for Sept. 4, with offerings of 224,000 bales of Australian wool. From the tone of the current discussion here it is considered doubtful as to whether the interest is keen enough to develop in actual business. Prices here are too low and manufacturers too indifferent to give wool importing much of a boost.

Some of the leaders in the trade appear to be getting their heads together in an effort to check the wave of pessimism which has been passing over the market lately; and which they appear to think has been greatly over-done. They regard the market as fundamentally sound, particularly so far as the domestic sorts are concerned. In spite of the fact that the situation has been a difficult one for a considerable period, and also that the definite turn for the better is not yet in sight, they believe that too much attention has been paid to the outs of the situation and not enough to the strong points.

They deprecate the hammering of the market which has been going on for some time, especially in certain manufacturing circles. This has been so persistent and so rampant at times as to give rise to a question whether some inspired propaganda was not being put out by interested parties to bring about a slump in values, if not a real "panic" in wool. This wave of pessimism had its inception in banking circles early in the season, or about the time that the buying of the new Territory clip had just gotten into full swing. That was one of the reasons why Eastern buyers did not follow up the early purchases.

Lately, it seems to have dawned upon those responsible for such action that the policy was a mistake, and it is understood that the word has now gone out to talk the market up as industriously as it was talked down earlier. "Spreading a wet blanket over the market," as one trade leader called the policy, was not the success that it was expected to be. Meanwhile, it has been found to be a slow process to restore confidence where it has been taken away by authority.

Last month the National Wool Grower printed an elaborate argument from a trade leader of the highest authority showing that the position of Territory wool was a strong one, so far as the near future of the market is concerned. With receipts of domestic wool in the Boston market 50,000,000 pounds behind last year, it is not believed that there is any chance of a permanent slump in Territory wool prices. Moreover, as has already been pointed out, an immense volume is held out of the market on consignment, presumably not to be sold until the market rallies.

Stocks of Territories, in fact of all domestic sorts, carried in the Summer-Street houses today are admittedly unusually light. Even the largest handlers of such wools do not claim that their stocks are normal. Some of the larger houses made a good turnover earlier, thus assuring them a good year's business, even if the market fails to rally as hoped. It is believed that it would not take much of an increase in the present demand to develop the real strength of the current situation, and to prove that

stocks of desirable wools are really scarce.

This is the situation as the wool man sees it. The key is still held by the manufacturer, who is not ready to buy, and will not be hurried. Some offerings have recently been made at such low prices that it would be foolish for a mill man not to take them, provided a need for them is possible to arise at any time during the remainder of the year. The standoff attitude of manufacturers in recent weeks has been very trying to the wool trade, especially, it is said, to the younger houses, whose experience does not include what happened in some of the lean years, during which the older leaders won their spurs.

Dealers have been very shy in regard to publishing the facts regarding their recent sales of domestic wools, especially the Territory grades. It is not known whether this reticence is mainly due to the fact that low prices have prevailed so much of late, or whether the manufacturers have been putting the ban of secrecy on all their operations. It is said that some do this habitually. There are times when it would be manifestly prejudicial to their interests to have the facts known until they had buttoned up their pending trades; but evidently the gumshoe work has developed into a habit.

Compared with a month ago, there has been a shrinkage in the values of good Territory wools of not less than 5 cents per scoured pound. Good fine and fine medium staple wools can not be quoted at over \$1.30 to \$1.35 clean, and some claim that \$1.30 is enough, and that it would take a pretty good lot of strictly fine staple to bring the higher figure. French combing wool of good character is quotable at \$1.25, and possibly \$1.20 for wools of somewhat less desirable character. Half-blood Territory is quotable on the clean basis of \$1.20 to \$1.25, though offerings are reported to have been well cleared.

Similar shrinkages in the current quotations on medium Territories are also observed. The three-eighths-blood grade is not quotable at over \$1 to \$1.05, and a good weight is reported to have changed hands at \$1.02 clean for very good wool. More variation is noted in quarter-blood than in any other grade. Some holders

are still holding their choice wools of this grade at 90 cents clean, but without takers. The bulk of the offerings are being made at not over 85 cents, 82 to 83 cents being talked as a fair price for less desirable lots. Some interest has been shown recently in low quarter-blood and braid Territory wools. Buyers have been trying to pick up some good lots at 35 to 37 cents, but holders are generally asking 40 cents clean, for the best lots.

The custom of the trade to quote Territories on the clean basis and fleece wools in the grease, makes it difficult to always compare values, and especially such changes as are noted from month to month. However, it is certain that the tendency has been pretty steadily downward in the latter as well as in Territories. Today's quotation for both fine unwashed delaine and half-blood combing is about 54 cents, with some choice lots held at 45 cents. A year ago, Delaine was quotable at 55 to 56 cents, and half-blood at 50 to 51 cents. The relative weakness in Delaine wools is the feature, and not a very encouraging one, of the current situation.

Three-eighths-blood combing also shows a remarkable change when compared with last year. Today's quotation for this grade is about 54 cents for good lots, where a year ago similar wools could be bought for not over 46 to 47 cents. These comparisons are made here simply to show the changes that have come over the position of Delaines which share with Montana fine staple the top seat in the wool manufacturer's regard. Quarter-blood combing fleeces are selling at 48 to 50 cents, and fine unwashed clothing at 50 to 51 cents. Some half-blood clothing is reported to have been sold recently at 48 to 49 cents.

The Texas woolgrowers have changed their attitude a little. Possibly they are tired of waiting for belated customers, as they are beginning to consign their wools. It was recently reported that a big lot of wool was consigned from Kerrville to Boston, the twelve-months' wool going to Studley & Emery and the eight-months' to Winslow & Co. In this market good 12-months' wool is quotable at \$1.30 to \$1.35 and eight-months' at \$1.15 to \$1.20.

There is a report current here that

there is a chance that the opening of the Australian auctions, scheduled for Sept. 18 at Sydney, may have to be postponed, owing to the dispute which has arisen between the wool growers and the selling brokers over the question of "draft." The allowance of draft is an ancient custom, and it will not be given up without a struggle. As is the case in London, American buyers are not expected to be particularly active at the opening, on account of the unfavorable conditions existing in the Boston market. In London the principal support of the market is expected to come from the Continent, and in the Australian auction from Japan and the Continent.

While the situation is distinctly lower than a month ago, as far as prices are concerned, best opinion is that a turn for the better can not be long delayed. September is expected to bring renewed interest on the part of manufacturers, and that is all that is needed, it is believed, to give the market a boost, and go a long way toward placing it on a normal basis again.

The above is written before receipt of cables from the opening sale of the London series on September 4. The Boston market will be influenced in large measure by foreign prices as shown in September sales at London and in Australia.

LONDON OPENS HIGHER

Report of the London opening wool sale was contained in the following special message received from Boston on Sept. 6, by the Salt Lake Tribune:

While the various grades of wool cannot be quoted any higher than heretofore, the strong opening of the London auctions, a somewhat better tone in the goods market and the disclosure that some mills are running low in raw material has improved sentiment and encouraged holders. The volume of sales is increasing slowly and would be heavier were it not for scarcity of several desired grades.

Private cablegrams from London auctions report Merinos and fine crossbreds par to 5 per cent higher, medium and low crossbreds 5 per cent higher, and faulty and washed clips 10 per cent higher. They also report France and Switzerland the chief buyers of Merinos, and England of crossbreds, while, contrary to press reports, Germany and America are quiet. Early offerings were poor grades suitable for the continent. America and Bradford will not operate until super Merinos are offered. The sales so far tend to confirm belief that a large wool vacuum exists in Europe and that France

and Germany will compete keenly for low and average wools.

Boston dealers have sent some salesmen out the past week and have secured a little business. Even where sales are small mills ask for very prompt shipment, indicating low stocks. Medium and low grades of foreign wools form the largest proportion of supplies here and holders are keen to sell. This helps to retard any general advance in prices. Choice Australian Merinos are getting scarce, but good lots of crossbreds still are plentiful. Dealers are daily refusing bids for domestic wool which would have been accepted ten days ago. Efforts to buy three-eighths-blood staple Territory wool at under \$1. clean, are said to meet with rebuff from holders. Some ask \$1.05 for choice lots, some sellers let good quarter-blood staple go at 80 cents, though 82 to 83 cents is generally being asked, and some lots are held at 85 cents. It is hard to get above \$1.30 for the best twelve months Texas, but eight months' Texas is steady at \$1.15 to \$1.20 clean.

California wools are quiet. Best northern sorts are quotable at \$1.25 to \$1.30, clean, and middle county varieties at \$1.15 to \$1.20. Ohio and other fleece wools are quiet, but it is claimed that the decline has ended.

The following sales already have been arranged: Adelaide September 21, Melbourne September 20 to 26, and October 13, Perth October 2, November 13 and December 18; Tasmanian sales will be held at Launceston January 7, and Hobart January 11. During the last wool season the complete volume of wool sold in the Australian auctions was 1,011,052 bales to the United Kingdom, 478,850 bales to France, 133,604 to Germany, 193,328 to other countries, 191,465 to the United States and Canada, 172,709 to Japan, India, etc., and to Australia buyers 201,257 bales. Despite continuous reports about the competition of Japan, that country really bought less wool in Australia than the United States. At Sydney and Brisbane Japan's purchases were heavier, but at all other markets in Australia and New Zealand the United States was by far the larger buyer.

ADVERTISING LAMB

A continual hitting of the nail on the head is required for the successful advertising of any commodity. Notable among the persistent advertisers of lamb are the packers, particularly Swift & Co. During the summer months, expensive displays in colors were carried by them in the most important women's magazines of the country, and more recently, twelve very attractive cards have been issued. Each card plays up a single idea regarding the value of lamb in the diet, or its proper preparation, and in addition gives two or more appetizing recipes.

The Department of Agriculture has also issued Farmers' Bulletin No. 1324, "Lamb and Mutton and Their Use in the Diet." This bulletin deals particularly with the use of lamb and mutton on the farm, the methods for its temporary preservation, and the proper ways of cooking the different cuts.

The Course of Sheep Markets In August

CHICAGO

Ten markets received approximately 1,040,000 live muttons in August, compared with 1,145,000 during the same month last year. The deficiency, coupled with a healthy demand for feeding stock, was the mainstay of the market, which acted creditably, especially in the case of lambs. No cyclone developed at Jersey City and the run of natives at other Eastern markets was gratifyingly small, resulting in a remarkably even trade. August is usually a price smashing period, especially toward the close when killers and feeders discount the usual heavy September movement, both of Westerns and natives. On this occasion declines of 50@75 cents were enforced toward the close of August in the case of lambs, mature stock holding steady. However, the trade had a healthy undertone, influenced by a strong Eastern demand and a broad feeder outlet. Had Eastern supply of native lambs been even equal to local meat requirements trading conditions would have been less favorable to Western growers. As it was they found a \$13.25@13.85 market for the bulk of their lambs, killers paying as high as \$14 for tops, while feeders went out at \$14@14.15. The month-end break put the best range lambs on a \$13.25@13.35 basis with fair to good at \$12.75@13.25 and culls \$9@10. Choice light yearling wethers were worth \$11@11.50, fair to good \$10@10.75. The best lightweights with a two-year-old top were eligible to \$9@9.50, aged wethers selling mainly at \$8.50@8.75. Choice light ewes, the product of which is vended as lamb, were in demand at \$7.75@8, medium weights going at \$6@7.50, heavies, \$5@6, and culls \$2@4.

The First Week

During the week ending August 4, ten markets received 191,000, compared with 212,000 in 1922. Activity in shipping circles nullified bear attacks by local killers, lambs losing about 35 cents per hundredweight,

while aged stock gained 25@50 cents. Choice Western lambs at \$12.50 were 35 cents under the high point of the previous week, most of the good to choice native lambs selling at \$11.75@12, with a \$12 top. Killers made an exception in the case of cull lambs, which advanced 50@75 cents, indicating that they had been bought too low. They paid \$8.50@9.25 for this grade and wanted more at the prices. Early in the week shippers bought Western lambs freely at \$12.50@13. Yearlings lost 50 cents in sympathy with lambs, \$10@10.25 taking the bulk. Most of the aged wethers cashed at \$7.50@9, the latter price requiring a percentage of two-year-olds. City butchers took light ewes at \$7@7.65, medium weights going at \$5@6.50 and heavies at \$3.50@4. Feeding lambs were scarce and demand far from urgent at \$11.75@12.50. Most of the breeding ewes sold at \$7 to \$9.50, with a few yearlings at \$10@11. Feeding yearlings went out at \$9@9.25.

The Second Week

The week ending August 11, delivered 146,000 at the ten markets compared with 213,000 a year ago. Light receipts advanced lambs 25@50 cents, culls showing most of the gain, yearlings and aged stock getting the short end of the appreciation. Keen feeder competition developed in the case of Western lambs, bulk of the fat Westerns cashing at \$12.50@12.65, with a \$12.85 top, while it was an \$11.75@12.25 market on most of the natives, under a light sort. For the first time this season packers had no lambs "direct" and were not able to dictate terms. Montana made its initial offering of sheep, wethers selling at \$8.75 and light ewes at \$7.75. Native lambs were a poor lot, but anything wearing a pelt got action, culls selling at \$8.75@9.75. Montana wethers cleared at \$8.50@8.75 to killers and \$7.75 to feeders. It was a \$7.50@7.75 market for light native ewes, a medium class going at \$7@7.50, with a string of sales ranging from \$4 to \$6.50, according to weight and quality. Marked

scarcity of breeding ewes prevented execution of an accumulation of orders, two and three-year-old stock reaching \$10, with yearlings anywhere from \$10 to \$11 and heavy breeders with age at \$7@8. Feeding ewes and wethers were wanted at \$5.50 and \$7.75 respectively, light feeding lambs earning \$12.65@12.75, with heavies penalized to the tune of 75 cents@1.

The Third Week

Ten markets received 196,000 head during the week of August 18, against 227,000 a year ago. As the Eastern dressed market was healthy, shippers were active and feeders were hungry for thin stock. Lambs advanced \$1@1.25 per hundredweight, cull stock showing a gain of 75 cents to \$1, yearlings of 75 cents to \$1, and sheep 50@75 cents. Fat Western lambs went to \$14, bulk of the Westerns taken by killers costing anywhere from \$13 to \$13.75, natives \$12.25@13.25, with a few at \$13.50, culls realizing \$9@10.50. Yearlings were in limited supply, several lots reaching \$11.50, aged wethers selling at \$8.50@9. Full loads of ewes could be easily counted, lightweights reaching \$8, most of the medium and handyweights cashing at \$6@7; heavies at \$4.25@5. Few breeding ewes were available and no feeding ewes were to be had, a few thin wethers going to the country at \$7.75. Demand for feeding lambs was far in excess of supply at a \$50@75 cent advance, country orders being executed mainly at \$13.25@13.50, with a \$13.75 top.

The Fourth Week

The final week produced 237,000 at ten markets, compared with 265,000 last year. Feeders took alarm and were responsible for declines of 50@75 cents on all classes of lambs, heavy stock and yearlings being hit hardest. Both killers and feeders were expectant of a substantial increase in September supply and discounted. The break carried the best lambs to \$13.50, most of the good to choice Westerns, weighing around 80 pounds, going at \$13.25@13.50, with \$12.75 a popular

price for natives, although shippers paid \$13.25 for selections, culls going at \$9@10. Wethers were scarce and fat ewes in anything but excessive supply held prices about steady. Aged Montana wethers sold at \$8@8.50, and \$5@6 bought most of the ewes available, although choice ewes were worth \$8.50. Feeding lambs went to the country mainly at \$13@13.45, some heavy stuff being taken at \$12.50@12.75. Demand for breeding ewes weakened, although yearlings reached \$11.50, most of the aged offerings selling at \$7.75@8.75.

Comparison Sept. 1 with the same period in recent years follows:

	—Sheep—		—Lambs—	
	Top	Bulk	Top	Bulk
1923	\$9.50	\$6.25@	9.00	\$13.40
1922	7.75	5.50@	7.50	13.00
1921	4.75	3.00@	4.25	9.00
1920	8.50	7.00@	8.25	14.25
1919	10.00	8.00@	9.65	15.00
1918	13.00	10.50@	12.75	18.20
1917	12.75	10.00@	12.50	17.60
1916	8.50	7.00@	8.40	11.25
1915	6.00	5.00@	5.75	9.10

ST. JOSEPH

Receipts of sheep for the month totaled 51,030, against 49,280 the same month last year. Of this number about 20,000 were from Idaho points, with Utah, Oregon and California sending one shipment each. Texas contributed around 1,500, and the balance was from native territory. Compared with a month ago, lamb prices are 75c@\$1 higher, feeders \$1@1.25 higher, and yearlings, wethers and ewes \$1@1.25 higher. Values on all classes held around steady until the middle of the month, with all of the advance being made during the third week. At the opening of the month best Westerns were quoted a \$12.35 against \$13.25 at the close. Natives sold at \$12.50 on the close, compared with \$11.75 a month ago. Feeding lambs were scarce and in good demand. Sales the last half of the month were only slightly under fat lamb prices. The bulk sold at \$13 on late days, while \$11.75 was the closing price in July. Best yearlings sold on the close at \$10, and wethers \$9. At the month's opening

best native ewes were selling at \$6 and Westerns at \$6.50, but on the close \$7@7.25 was taking best natives, with Westerns quoted up to \$7.75. Breeding ewes were scarce and in good demand, and many more could have been used had they been available. Most sales were around \$8 @8.25, with a few choice lots reaching \$10 on late days. H. H. M.

KANSAS CITY

The sheep market in August developed more than the anticipated strength. At the close of July there were no definite opinions as to which way the market would turn, and trade in the first ten days of August was rather uncertain and inclined to be indifferent. Prices sagged below the close of July, but by the middle of August they were on the upgrade again and general sentiment is that for the next sixty days there will be a large demand and strong prices. The speculator and feeder buyer, operating in the range country in the past three weeks, has brought the new element of firmness and now the feeder is bidding against the killer buyer in the open market, and repeatedly paying more than the top offered by killers. In other words, the feeder has bid the market up on himself and killers were forced to follow that lead to get supplies to meet urgent requirements. In the last half of August more range lambs went under contract than in any previous similar period this year, and thin lightweight lambs on the open market sold repeatedly 50 cents higher than fat lambs. This activity on the part of feeders has been a good thing for Western flockmasters, as the range market has advanced fully \$1 and asking prices are \$1.50 to \$2 higher than in early July. In some cases banks and loan companies have refused to finance purchases of thin lambs at market at \$12.50 and \$13 a hundred pounds, but this did not seem to restrict general demand.

For the past two years active buying by cornbelt feeders in August has brought about changes in the general

price outlook, and this year conditions are running true. It is now evident that the cornbelt is going to feed as many lambs as they can get hold of, and flockmasters in the mountain and intermountain states have been advised to hold thin, lightweight lambs at 11 cents f. o. b. loading points. In Texas large contracts have already gone to the cornbelt for a short feed with the intention of marketing in November and December. Last week 44-pound Texas lambs sold at \$12.50 and Idaho and Colorado feeding lambs sold straight at \$12.75 to \$13.25. In some cases feeders bought Idaho lambs straight at \$13 and sorted out the fat lambs and sold them to killers at \$12.75. The aggressiveness of the feeder buyer is the outstanding feature of the general market.

Those who have expressed an opinion, believe that the feeder this fall will find average cost of thin lambs, laid down in feed lots, \$13.50 to \$14, and that it will take a price of \$15.50 to \$16 when fat, for the feeder to break even. It is fine for the producer to receive high prices for thin lambs, but it puts the feeder in a tight place to make both ends meet. A bad year for the feeder means less favorable prices for thin lambs the following year.

Western Nebraska, Michigan, Missouri, Kansas and Colorado feeders have been the largest buyers of thin lambs thus far. In the range states, buying has been principally by speculators, and thus far they have been able to turn their contracts to a good advantage. As far as feed conditions are concerned, the cornbelt will be able to feed more lambs this winter than last winter. The corn crop will exceed three billion bushels, approximately two hundred million bushels more than last year. Hay and rough feed crops will be large and recent rains have insured excellent fall and early winter pastures. Notwithstanding the larger corn crop, prices will start the crop year nearly 85 per cent higher than last year, but later will not attain the high levels reached this spring. The small feeder, because

THE SHEEP EXCHANGE

Advertisements are received for this column to be paid for at the rate of \$1.00 per half-inch (25 words), cash with order. Advertisements must reach the office of the Wool Grower by the first day of the month for insertion in the current issue.

EWES FOR SALE

500 choice Hampshire ewes, aged 2 to 5 years.

1,500 Rambouillet ewes, ages 2 to 5 years.

THE J. P. RANCHES CO.
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CORRIEDALE RAMS FOR SALE

Forty yearlings,—half, three-quarter, and a few full-blooded. Priced right.
SPRING HILL FARM
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Extraordinary quality; large, thrifty, range raised. Prices reasonable, according to age and quality.

Ewes, yearlings and two's...2,000 head
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Rams, 2-year-olds 57 head
Rams, 3-year-olds 12 head
Rams, four's and five's 12 head

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300 head of Hampshire yearling rams.
200 head of Rambouillet yearling rams.

These sheep have been bred to one line for twenty years and while the ewes are not registered only registered rams have been used during the entire time.

They are heavy boned, well grown, and just the right kind for first-class range service.

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500 YEARLINGS
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All of Rambouillet breeding. Delivery after October 15th. Can be shown at any time. Write for prices to

LEE & SPAETH
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Rambouillet Range Rams

We are offering ninety head of yearling Rambouillet range rams. These rams are in excellent condition for service. They are from Butterfield foundation stock and are not excelled for services for the range man. They were grown on the range. They may be seen near Weiser, Idaho. Phone or write to the man in charge, J. E. Ballard, Weiser, Idaho, R. R. No. 4.

H. G. PECKHAM, Owner
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Deer Lodge Farms Co.

Deer Lodge, Montana

Pure Bred Rambouillet

Range Rams

Registered Rambouillet Stud
Rams for 1923 Fall Delivery

ATTENTION WOOL GROWERS

I offer for the '23 season 550 yearling and 100 two-year-old rams, bred from pure-bred Delaine ewes and top stud, registered Rambouillet rams—Rambouillet for size and Delaine for wool.

C. R. TINTINGER
Cascade, Montana

of the large amount of available rough feed, is being encouraged to feed lambs this fall. Good to choice feeding lambs are bringing \$12.50 to \$13.25.

Had it not been for the feeder demand showing large volume in August, killers would have had prices under the \$12 level, but as it was, the last half of the month they were paying \$12.75 to \$13.35 for fat Western lambs and \$12.25 to \$13 for natives. Even at these prices killers got a smaller per cent of the August run than usual. They turned their attention to fat sheep, and ewes and wethers advanced as much as fat lambs. Wethers sold at \$8.25 to \$9 and ewes \$6.25 to \$8. Several bunches of old straight grass ewes brought \$6.50 to \$6.90. One band of 2,000 thin Texas wethers went to feeders at \$7.25, and all the breeding ewes offered were in odd lots. One lot of 500 breeding ewes, picked up in small lots of two to fifteen head, brought \$8.50 a hundred pounds. What would be the extent of the breeding ewe demand, if more were available, is hard to estimate, but at the present rate of arrival, it is evident that demand will exceed the supply.

In August 117,126 sheep arrived. This was 14,700 more than in the same month last year, but not especially heavy for August. This supply was mostly natives, Texan and Idahos. A few arrived from Colorado. Railroad reports indicate that the September run will include increased shipments from Colorado and Utah, and a decrease in Texan, Idahos and natives.

C. M. P.

DENVER

Sheep receipts on the Denver market were heavier in August of this year than for the same month of 1922. For the year ending August 31st, however, the supply at this market shows a decrease of approximately 15,000 head, as compared to the same period of last year.

Active trade and strong demand

during the past month sent prices upward. The feature of the market was the strong inquiry for feeding lambs, and the fact that feeding stock often outsold the fat lambs. Excellent feed conditions in the West are expected to result in many of the lambs from the ranges coming to market this fall. Thereby the number of feeders available will be cut materially. Many breeding flocks must also be replenished by the holding of the ewe lambs. The result is bound to be a shortage of feeding material and the scramble to secure supplies is now on. Trade is expected to be active at Denver during the entire fall season.

Choice lambs sold early in August at \$11.50. At the close of the month the same grades were bringing \$12 to \$12.25. Feeding lambs that sold earlier at \$11.75 to \$12 are now finding outlet at \$12 to \$12.35.

Ewes were selling on August 1st at \$5.75 to \$6, whereas choice kinds were quoted at the close at \$6 to \$6.75. W. N. F.

ARIZONA WEATHER ADVERSE AND DIVERSE

The drought that has been camping on the trail of the Arizona stockmen these many months has about gone by the board. Good rains have recently fallen over most part of the state. Only a few small isolated places are suffering for lack of water at this time, but with Jupiter Pluvius now doing business in his usual form, it is expected that these sections will be relieved soon.

Unprecedented weather has been the rule thus far this year in Arizona. About all kinds of atmospheric conditions known to the experts of the United States Weather Bureau have prevailed except those needed most. Truth to tell, the elements did some unusual team work, got right down to bedrock, so to speak, and turned out weather that left many things to be desired. At first it was cold enough to freeze a Laplander, then suddenly it changed to the other extreme, get-

ting hot enough to fry an egg. Holding sway through all the modes and tenses was the drought, a hang-over from early in the year.

Choice fat lambs are as hard to find in Arizona this year as facts in a political speech. On account of the dry weather lambs failed to thrive, and consequently but few have attained marketable form. Thus far not to exceed 40,000 head have gone for slaughter. This is the fewest in many years.

In the aggregate Arizona's lamb crop this year is below the average in point of numbers. Down on the lambing grounds last spring where it was dry in more ways than you could shake a stick at, a big percentage was at first reported, but according to some of our good shepherds, this seems to have been a sedative sent out to safeguard testy bank directors against nervous breakdowns. Later, when these worthies who guard the portals of our financial institutions were away taking the rest cure, it transpired that the average was not so large as at first reported.

Reports from the ranges are that a large number of ewe lambs will be carried over this year. Old ewes are much in evidence just now and will need to be replaced soon. With no young native ewes of good blood line for sale, growers are finding it necessary to carry over ewe lambs of their own raising for replacement purposes. While this may be a slow way over the hill, it seems to be the only one just now.

At this writing, August 29, not a great many feeder lambs have been sold in Arizona. While there are many such lambs for sale, growers seem reluctant to accept the prices that have been offered, some of which have been as low as 8 cents a pound. Rumors are that a few sales were made recently at 9 and 9½ cents per pound for desert lambs, with the fat end going in one instance at 10 cents. Many growers are optimistic as to the outlook for feeder lambs, believing that higher prices will prevail shortly.

Bert Haskett.



I will introduce my Rambouillets at the 1923 Ram Sale with two single studs and a pen of 20 range rams.

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I also have for sale 100 high-class yearlings at Rosenlunds, Schellbourne, Nevada.

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Kills Sheep Ticks, Lice, Scab Mites and other Parasites

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Kills many parasites; disinfects; prevents disease. Easy to use—economical.

Kreso Dip No. 1 is for sale by the Drug Trade.

Write for free booklet on the care of sheep and all livestock.

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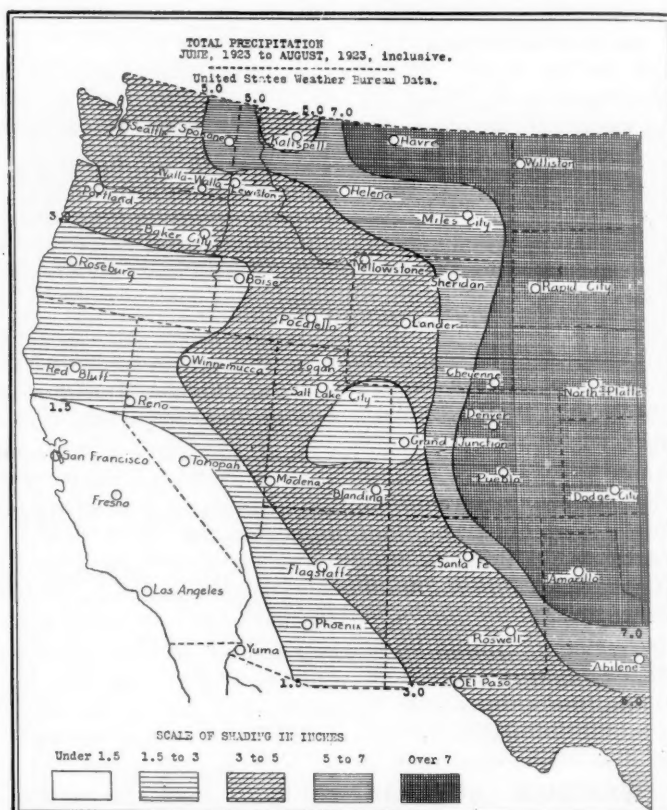


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My Rambouillets are large, smooth and well covered with heavy fleeces of long white wool. They are bred in a high, dry country and are very hardy. I have 2000 one and two-year-old rams for this season. If you visit California, call and see my flocks. My prices are reasonable and my rams will suit the range country.

CHAS. A. KIMBLE,
Hanford, Cal.



THE RECORD FOR JUNE, JULY AND AUGUST

Precipitation on the Western live stock ranges during June, July and August, 1923:

WASHINGTON—		Total Excess or
		Amt. Deficiency
Seattle ..	3.67	+1.00
Spokane ..	5.92	+3.16
Walla Walla ..	3.79	+1.76
OREGON—		
Portland ..	3.62	+0.65
Roseburg ..	2.11	+0.39
Baker City ..	3.90	+1.87
CALIFORNIA—		
Red Bluff ..	2.06	+1.58
San Francisco ..	0.07	—0.11
Fresno ..	T	—0.10
Los Angeles ..	0.02	—0.05
NEVADA—		
Winnemucca ..	3.08	+2.10
Reno ..	1.75	+1.12
Tonopah ..	0.57	—0.57
ARIZONA—		
Phoenix ..	1.44	—1.07
Flagstaff ..	2.73	—3.61
NEW MEXICO—		
Santa Fe ..	4.63	—1.48
Roswell ..	4.55	—1.38

TEXAS—

Amarillo ..	13.15	+4.18
Abilene ..	5.31	—2.23
El Paso ..	3.25	—1.15

MONTANA—

Helena ..	6.25	+2.38
Kalispell ..	4.05	+1.08
Havre ..	11.69	+5.69
Miles City ..	4.92	—0.33
Williston ..	8.36	+1.45

IDAHO—

Lewiston ..	3.58	+1.75
Boise ..	2.93	+1.71
Pocatello ..	3.23	+1.05

UTAH—

Logan ..	3.03	+0.93
Salt Lake City ..	3.46	+1.37
Modena ..	3.18	—0.31
Blanding ..	5.44	+2.20

WYOMING—

Yellowstone ..	3.73	—0.35
Sheridan ..	9.99	+6.20
Lander ..	3.35	+0.84
Cheyenne ..	7.61	+2.58
Rapid City, S. Dak.	11.49	+3.24
North Platte, Nebr.	11.53	+3.14

COLORADO—

Denver ..	10.16	+5.73
Pueblo ..	9.61	+4.60
Grand Junction ..	2.50	+0.56
Dodge City ..	6.37	—2.92

RANGE AND STOCK CONDITIONS

By J. Cecil Alter

The distribution of precipitation through the summer months has been somewhat out of balance, conditions of ample rains appearing over most of the states of Washington, Oregon, Idaho, Montana, Wyoming, Colorado, Utah and northern Nevada, while deficiencies of rain, reaching threatening proportions in midsummer, persisted over southwestern Texas, New Mexico, Arizona, and southern parts of Nevada and Utah. However, late August rains have greatly improved these conditions.

Utah stockmen have been favored with good mountain grazing during August and with a fairly satisfactory winter range production. Nevada live stock have done well excepting only in the southeastern portion. In Idaho scattered reports persisted through August of the need for rain, though feed remained ample and stock did well. Pasturage and live stock have been excellent in most of Montana.

Wyoming range grasses have cured favorably except in a few sections. Colorado ranges and live stock continue good or excellent generally. The western Texas range is fairly good, having shown improvement lately. The New Mexico range has been spotted; pasturage and stock have improved in recent weeks. Arizona ranges and stock have also improved considerably and the winter range outlook is much better than a month ago.

California stock have done well in the mountains, and the mountain ranges of Oregon have furnished ample feed, though the dairy pastures in Oregon have been too dry. Rains have kept the Washington pastures mostly refreshed.

CROP CONDITIONS IN OREGON

Feed conditions on the Oregon ranges have continued during late summer the best in many years. A rain storm, the heaviest on record for July in most of the eastern Oregon

country, swept that district very generally, being concentrated in central Oregon. Some grain was damaged, but little harm was done to alfalfa. More rain fell in the Blue Mountain country and in central Oregon around August 20, and indications are that fall and winter ranges will be excellent.

Your correspondent recently made a trip across the high desert from Bend to Burns and north through Grant County and out into central Oregon again by way of Mitchell and Prineville. Grass was growing profusely on the high desert and for the first time in many years the few remaining homesteaders had fairly good crops of rye hay.

A journey through this district and more particularly perhaps along the valleys of Harney County and the Fort Rock district in Lake County, bring vividly before one's observation one of the real tragedies of the Western country. In these districts homesteaders' deserted shacks hold silent watch over the again lonely desert, while tumbling fence poles and tangling stretches of wire bear evidence of the hopes of paying crops which brought into this interior country many hundreds of new settlers in the period shortly around 1910 and for a few years after. In the Fort Rock country, for instance, a favorable crop season about ten years ago created the impression that a famous dry farming country was to be opened up. Business concentrated in the city of Fork Rock. Several stores, a creamery, a newspaper and other adjuncts of an up-to-date community center were established, but no more crops were grown. Gradually the settlers departed. Drouth and frosts killed every crop, except here and there a little rye hay in a sheltered valley. Now but few families remain.

The story of Catlow Valley in Harney County can be told in the same words. These lands were formerly good range lands and never should have been settled for farming purposes.

In fact, there is much land lying nearer to the centers of trade which

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My 1923 offerings:
400 Registered Yearling Rams (chiefly polled.)
200 Registered Yearling Ewes.
6 Registered Percheron Stallions, 3 years old.
Matched teams of Registered Percheron mares.

W. S. HANSEN, Collinston, Utah

Raup's Ohio Rambouillets



YEARLING RAM

Second prize lamb at International, 1920.

MY OFFERINGS FOR THIS SEASON ARE:

60 head of Yearling Rams

50 head of Yearling Ewes

40 head of 2-year-old Rams

Also breeding ewes from two to nine years.

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Springfield, Ohio, R. D. 10

American Rambouillet Sheep Breeders Ass'n

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J. H. King, Laramie, Wyoming

Secretary

Dwight Lincoln, Marysville, Ohio

For history of the breed, list of members, rules, pedigree blanks, etc., address the Secretary.

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These are big, heavy-boned and well-covered rams, ready for heavy service anywhere and sure to increase wool yields and lamb weights in any flock. Prices right.

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Mt. Pleasant, Utah

PAROWAN

RAMBOUILLETS

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200 head registered and pure-bred ewes.

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FRANK H. RUSSELL, Box 80,
Wakeman, Ohio

could well be eliminated from the farmed areas. Apparently one of our great difficulties at the present time lies in the fact that there are too many people on the farm. At any rate, farmers are producing more of most commodities than the world can absorb at a reasonable figure. The back to the city movement, which is already under way, is a favorable indication and will continue until a proper balance is once more established. This is likely to occur much sooner than many people anticipate. All this seems to be leading quite a distance from Oregon's sheep ranges, but the effects are felt there as in all lines of industry.

The Oregon hay crop shows a slightly better forecast than the five-year average, and showed an improved condition in July. The second cutting of alfalfa was heavier than usual and the quality was not altered materially by rain. Part of the first cutting was damaged to some extent.

Central Oregon hay growers are almost a unit in applying sulphur to their alfalfa fields. Ninety per cent of the acreage in Crook, Deschutes, Klamath, Lake, and Wasco Counties is treated with one hundred pounds of sulphur every three years, or forty or fifty pounds every year. In Deschutes County the yields are easily doubled.

Western Oregon sheepmen last month joined in the first annual tour of the Oregon Shropshire association. The trip covered a period of two days, and at most points the party was composed of fifty or more breeders and friends intent on looking over the stock of their neighboring breeders. The party organized on the farm of George Armstrong of Corvallis, and went north through Linn, Marion and Polk Counties.

Considerable anxiety is felt over the wool marketing situation, although it is estimated that 75 per cent of the Oregon wool clip was sold on the good market. The remainder, however, amounting to around three million pounds, it is thought, is a sufficient volume to create some concern.

F. L. Ballard.

OREGON LAMBS MARKETING

The first of the Lake County lamb crop is moving to market weighing about ten pounds per head more than for the past few years. This is due to the exceptionally good range conditions throughout the south-central Oregon country. Frequent spring and summer rains made feed better than it has been for many years. One lot of lambs normally weighing 65 pounds during the latter part of August averaged 75 pounds. Another band of 1,600 weighed nearly 80 pounds per head. These, of course, were lambed early during the fore part of March.

Practically all of the 60,000 lambs shipped out of Lakeview annually are sold by the head rather than by weight. Thus far this season \$6.90 has been the top price paid and the bulk of the 4,500 lambs already shipped has been sold at \$6.50 per head with a three per cent cut. On August 25th one lot of 2,000 lambs sold subject to delivery in San Francisco at 11½ cents. The average weight was 80 pounds and the grower figures he will net 10 cents after deducting shipping costs to San Francisco.

The bulk of the south-central Oregon lamb crop dropped in May is sent to market between September 20th and November 1st. Owing to the heavier weight this season it is thought that the movement will be somewhat earlier. If present prices hold Lake County sheepmen will have climbed a long way out of the indebtedness brought on during the period of deflation and heavy debt.

Lake County wool growers, bankers and merchants stand strongly behind the effort now being made to keep the tariff as it is. They hold unanimously that any change in tariff at this time would be ruinous to the West. Lakeview, Oregon. William Teutsch.



Our type of sheep for economical wool production under range conditions
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David Dickie, President

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**600 Yearling Stud
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also some Ewes.**

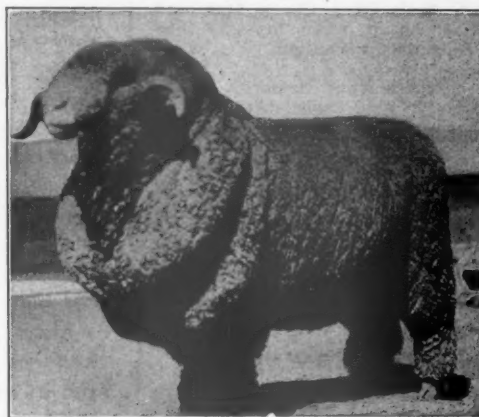
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Ewes for August and
September delivery.

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Proprietor

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Old 467, Grand champion, Sanpete County Fair, 1920
and 1921. Grand champion, State Fair, 1921.

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A few choice yearling Romney rams from imported New Zealand ewes and by English sires. A few yearling Rambouillets, also a few rugged three and four-year olds. Our Lincoln and Cotswolds are mature rams, suitable for two or three years' service. All rams in A No. 1 condition. Can be seen near Soda Springs, Idaho.

Write, wire or phone **Knollin-Hansen Co.**
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IDAHO QUARANTINE REGULATIONS

The following notice is issued by the Idaho Sheep Commission:

All sheep coming from Oregon must have a Federal certificate showing that they are free from scab, and originated in a district where scabies has not existed for twelve months preceding.

Sheep coming from a district where scabies exist may enter the state if the Federal certificate shows they are clean, provided they are dipped under Idaho supervision and regulations, either en route, or within ten days after reaching their destination. No sheep will be considered free from quarantine till this regulation is complied with.

Sheep with scabies or directly exposed to it must be dipped under Federal supervision in Oregon before they can enter the state.

The Idaho Sheep Commission feel that they have been extremely lenient with sheep coming from Oregon after last year's experience. A large percentage of our last year's outbreaks was directly traced to Oregon importations, and the commission feel that in view of this these regulations are fair and reasonable.

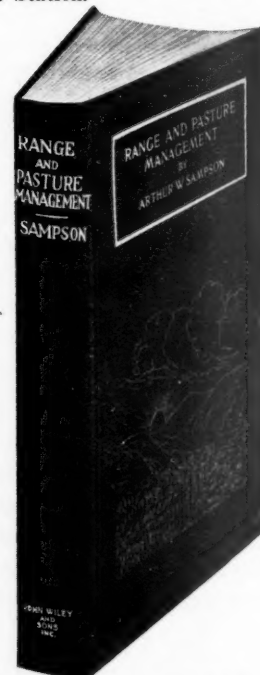
Idaho, as far as we know, is free from scabies at the present time. We are, however, expecting to hear of an outbreak any time, as there are several localities where exposures must have taken place from last spring's outbreaks.

Hugh Sproat.

RANGE and PASTURE MANAGEMENT

By Arthur W. Sampson, M.A., Ph.D.

Associate Professor of Range Management and Forest Ecology, University of California. Formerly Plant Ecologist, U. S. Forest Service, and Director, Great Basin Experiment Station.



It is a pleasure to announce the publication of this book dealing with the practical care and management of range and pasture lands by Dr. Sampson, whose interesting articles have been printed at various times in the National Wool Grower. The book consists of 428 pages, 130 illustrations, and treats in a clear and comprehensive manner the following subjects:

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- 2—The reseeding of the range.
- 3—The recognition of the early stages of pasture-forage decline.
- 4—The leading introduced forage plants and their culture.
- 5—The adequate protection of timber reproduction against grazing on potential timberlands.
- 6—The burning of pasture lands and its effect on forage yields.
- 7—The poisonous-plant menace and its control.
- 8—Forage estimates and grazing capacity.
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